Previous references
Agr 69-10)1-10
S a 514-10)1+3
Secr 187-10)1-46-9
Later references
Edn 435-11 (607)

1913-14
(Edncatn)

File No 435-11
Serial Nos 1-5

GENERAL AND REVENUE SECRETARIAT

Serial Nos 1 to 5

Part B for August '13

SUBJECT

Report on the Allahabad Exhibition of Decr 1910

---

1 From the Govt of Edn 8495-9 dt 3/5/12
636
Forwards 12 copies of each of the reports on the Allahabad Exhibition of Decr 1910 by Messrs G Krishnarao, M Srinivasaraw, M Hanyanna & Bava Sahib Anyan & states that Mr Subbasawmy Iyer's report has not yet been received in spite of several reminders

2 I. S. From the same Officer no 8556/643 dt 7 5 12 In continuation of Sl 1 forwards 12 copies of the Appendix to the report of Mr Hanyanna (P-

Head Master Normal School Mysore

3 To the I G of Education no 7529 dt 26/3/13
Enquires whether the report of Mr—
Subbasawmy Iyer has once been
received in his office, and if so requests
him to forward it early to Govt and,
if not to ask Mr Subbasawmy Iyer
to submit his report at once and to
explain the delay in the matter

4 From the I G of Edn no 167/17 dt 2/7/13.
States that in spite of 5 reminders
ranging from 4 4 11 to 13 5 1913 Mr —
Subbasawmy Iyer has not submitted
his report and that apparently there
is little likelihood of his sending it
now

5 To the I G of Edn Comptr & Director
of Industries & Commerce 1812-4 & 11-8-13
Directs the recovery of the Fa te allowances —
amounting to Rs 372-7-0 drawn by
Mr Subbasawmy Iyer in connection
with his trip to Allahabad & other
places, from his pay in the usual course

G V S. Rao
15/8/13

(R S 11]

1911-12

GENERAL AND REVENUE SECRETARIAT

(Edn)

NOTES

File No 435-41

THE HEADING

Report on the Allahabad Exhibition of December 1910

From

The Dy of Edn

No 8495-9 / 636 Dated 3 5 12 Received 7 5 12

Diary No 6530 Encls 4 Spare Copies 44 Serial No 1

THE ABSTRACT OF THE

Forwards 12 copies of each of the reports on the Allahabad Exhn of Dec 1910 by Messrs C Krishna Rao, Dy Srinivasa Rao, M Hanumanna, & Bava Saheb miya & states that Mr Subbarami Iyer's report has not yet been received in spite of several reminders

NOTES AND ORDERS

Serial 2 From the Same Dt no 8356-7 / 643 Dy 7 5 12

In contn of sl 1 forwards 12 copies of the appendix to the report of Mr Hanumanna, Head master, Normal School Nuzvid.

1 The reports were called for in G.O. no 5530 Edn 1907-10

NOTES—First Sheet

C I B—10 000—2 5 11

6530, 6578

GRS 12]
General and Revenue Secretariat

Eon File No 435 of 1911

Serial No

9 21 12 10 This has been submitted to the Dewan by the Financial Branch with it on 24 4 12

Mint for 2 Eon 3826/111

2 — Submd for perusal that the reports be sent to the Library after perusal ?

Has this since been received back ? If so, put up please

8/R 2 -126 15-5-12

10/11/12

KW 33 15/5/12

3 To Por II for kindly stating whether the Eon file has since been received back and if so to put it up

PRV 15/4

8/R 2 -126 14 11 12

4 No The file has not come back.

PRV 20 11 12

5 Submd for perusal

KW 33 22/11 Secretary

5/12/12

6 Seen 23 9/12

7 To Eon Are no steps necessary, the reports having been submitted in accordance

NOTE—Contn sheet

657

P S 12]

General and Revenue Secretariat | Educ File No 485 of 1911-12

Serial No

with the directions of Govt-? I was under the impression that the printed copies of the reports in this file are were only spare copies sent for record, the original reports having been sent up in manuscript or type, and that orders had been passed on such reports- Reading the Dep^r Govt's letter now, however, it seems doubtful whether this is the case. Please look into the matter and note-

Hand 1015-12

by
10 12 12

P S
P M

8 Dated with Govt- 1697-10 (Dr 1654 Dr 1693) and Dr 5711 of 1911 Dr 1693 on the subject- From the latter it is seen that the reports of the Officers deputed to Allahabad have been dated to Govt- by February 1911 (Page 15- Council Resn) No Report of Mr- Subbramanya Iyer has not yet been submitted It is not known why he has not yet dated his report though several Reminders are said to have been issued from the Dept's office.

NOTE—Contn sheet

GPB—C5 000— -6 12

P S 12]

General and Revenue Secretariat

File No 435 of 1911-12

Serial No	
2	Ask Dfc whether Mr S Iyer's report has since been received, and if so to send up some copies — 19 3 13
	To Draft Issued 19/3/13 " Issue 22 3 13
3	To the Dy of Eon no 7529 dy 26 3 13 Enquires whether the report of Mr Subbaswamy Iyer has since been received in his office and if so requests him to forward it early together, & if not to ask Mr Subbaswamy Iyer to submit his report at once & to explain the delay in the matter
4	From the Dy of Eon no 167/13 dy 2 7 13 States that in spite of 5 reminders ranging from 4 4 1911 to 13 5 1913 Mr Subbusami Iyer has not submitted his report and that apparently there is little likelihood of his sending it now
12	Secretary's orders on the above — 'Please let me see the file' Id C S B 8 7 13

NOTE—Contn sheet

GIE—C 000—1 C

242 5

P S 13]

General and Revenue Secretariat | Esn File No. 435 of 1911-12

Serial No

14

Enclosed with references the Divan has issued the following order on the abstract of Cuttack D.S.7/13 regarding this Commr. from the D.C.:-

"Allowances should be recovered from the pay P S D to arrange"

Orders M.V 9/7/13

10/7/13 15 Secretary

hz 11/7/13

15 13

16 File Remitted the Report has not yet been received

17 Secretary hz 31/7/13

Vim 23 30/7/13

18

Please ascertain the amount of allce & intimate direct to Director of Industries under whom no S is working at present to recover the allce from no S's pay after refund

CBK 31/7/13

P T O

NOTE—Contn sheet.

242 b

R S 12]

General and Revenue Secretariat

File No 435 of 1911-12

Serial No

Dated

It has been ascertained from the Comptroller's office that the Subdivisional Officer has drawn Rs 372-7-0 in connection with his trip to the Allahabad Exhibition. A draft order is put up.

It is not known whether the reports of the following officers who were also deputed to the Allahabad Exhibition have been received or not —

These are subordinate officers who were deputed conjointly, so to say, with the Subdivisional Officer, and reports from them need not, it seems, be insisted upon — [illegible]

(1) Mr. M G Ramachandra Rao Asst Supdt, Govt School, (Now Sub-Assistant Supdt)

(2) R T Ramakrishnan, Drawing Master of the same School

[illegible] 5/8/13 (18) Secretary

[illegible] 6 & 13

Draft-Sec'y for approval

1872 6/8/13

Please put up the G.O. & O.M. 1210

of which [illegible] sanctioning the Sub-Dyer's deputation.

7/8/13

G.O. No 3843-5/Agri 69-10-38 14 12 10, referred to in G.O. No 5530-21/Edn 187-10 & 21 12 10

[illegible] FILE (C)

NOTE—Contn sheet

GPB—65 000—17-6-12.

242 (7)

R S 12]

General and Revenue Secretariat | Edn File No 435 of 1911—12

Serial No	
	Draft appd by 1st Counsellor 8 8 13 MS
	Issue CSB 9/8/13
5	To the DG of Edn, Compln & Dev^t of Ind & Com 1912—4 9 11 & 13 Directs the recovery of the to allow amounting to Rs 372-7-0 drawn by Mr. Subbaswami Iyer in connection with his trip to Allahabad & other places, from his pay in the usual course

NOTE—Contn sheet

GIP—65 060—1 f 12.

General and Revenue Secretariat

Abstract of Tappal—Dated 8 7 1913

No	From whom	Brief abstract
	I G of Education	Refers to G R A Subject No 261 of 1912 regarding the introduction of Agriculture or some industry as a Compulsory subject for the Lower Secondary Examination States that Govt pass orders on the report of the Practical Instruction Committee submitted last year, the Scheme given in the report will do for some years to come till practical instruction is systematized and develops itself to enable another step being taken
	—do—	Recommends two Scholarships of Rs 25/- each for two girls

(9

General and Revenue Secretariat

Abstract of Tappal—Dated

No	From whom	Brief abstract
		that pass best in the School Final Examination from the State High Schools- States that these Scholarships may be granted from year to year for 4 years till the B A Course is completed in any of the State colleges
	Govt	
3	I G of Education	States that in spite of 5 reminders, Mr G Subbaswamy Iyer has not submitted his report in connection with the deputation to the Allahabad Exhibition of 1910 and that there is apparently little likelihood of his
	will be sent to Secretariat for the day- records after work is done	
	6/0	
	9 7 13	

(10

General and Revenue Secretariat

Abstract of Tappal—Dated

No	From whom	Brief abstract
		Sending it now
	Dewan	Bhandaram Registrar G R S
		8/7/13

6530

Edn 81]

OFFICE OF INSPECTOR GENERAL OF EDUCATION IN MYSORE

No 8495-9 / 636 Enc 48 Reports *Bangalore* 3rd MAY 1912

From

The *Inspector General of Education in Mysore*

To

C S Balasundaram Iyer, Esq , B A ,
Offg Secretary to the Government of His Highness
the Maharaja of Mysore, General & Revenue Departments

SIR

1-4, 6-9 With reference to Government Order No 5530-32/Edn 137-10-2 dated 31st December 1910, I have the honour to forward herewith 12 copies of the reports of each of the following officers on the Allahabad Exhibition of December 1910 -

1 Mr C Krishna Rao, B A , Head Master, High School Bangalore
2 Mr M Srinivasa Rao, B A , Inspector of Schools, Mysore Circle
3 Mr M Hiriyanna M A , L T , Head Master, Government Normal School, Mysore
4 Mr M Bavasahib Miyan Superintendent, Government Industrial School, Channapatna

2 The Report of Mr Subbaswamy Iyer, B A , L T , Superintendent, Industrial School Mysore has not yet been received although several reminders were sent to him on the subject

I have the honour to be,
Sir,
Your most obedient servant

Assistant to the Inspector General
For Inspector General

GPB—1500—9 6 09

TMR

6530

1911 O 12

Edn 81]

OFFICE OF INSPECTOR GENERAL OF EDUCATION IN MYSORE

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I have the honour to be,
Sir,
Your most obedient servant,

GPB—1500—9 6 09

Assistant to the Inspector General
For Inspector General

TNR

No 283 GOVERNMENT HIGH SCHOOL BANGALORE
Dated 7th February 1911

FROM

MR C KRISHNA RAU
Headmaster Government High School Bangalore

TO

J WEIR ESQ M A
Inspector General of Education in Mysore

SIR

In pursuance of Government Order No 5330 2—Edn 187 10 dated 21st December 1910 I have the honor to submit the following report about my visit to the United Provinces Exhibition of 1910 11

The arrangements made for the Exhibition were on a grand scale Picturesque buildings with well laid out roads were specially erected for the purpose on an extensive plain along the banks of the Jumna The Exhibition was regarded as the largest ever held in India To add to the attractiveness of the Exhibition provision had been made for various amusements Stalls in which expert artisans from different parts of India carried on weaving and cotton printing made musical instruments and worked in wood stone or metal as they did in their native towns formed a special feature of the Exhibition Here was a unique opportunity for artisans to study at first hand the methods of work adopted by experts in other parts of India in the special branches of work in which they were engaged Water lifts water pumps of various kinds and agricultural machinery could be seen at work in the Agricultural Court

2 Having spent two days in acquainting myself with the general arrangement of the exhibits I spent the remainder of the time in examining more minutely such of the exhibits in the *Educational Court*, *the Ladies Court* *the General Industries Court* *Wood Stone and Metal Court* and *Fine and Applied Arts Court* as appeared to be of interest from an educational point of view

3 *The Educational Court*—Of the Educational Court the special correspondent of the *Madras Mail* wrote on the 30th November last as follows —

This court ought to interest all engaged in educational work in India as it is the first organised attempt to exhibit in a comprehensive manner what is being done in the Indian educational field and what yet remains to be done

In this court the exhibits were grouped according to the branch of instruction to which they related Thus were grouped together exhibits relating to primary schools girls schools secondary schools colleges manual training commercial schools technical and industrial schools and art schools The Indian and European exhibits were placed side by side for comparison Most of the exhibits from Indian schools came either from Normal or Training Schools or from large Mission Schools which are usually under the management of a cultured European lady teacher or Superintendent

4 *Primary Schools*—The exhibits in object drawing from the *Dacca Normal School* and *Kanda Middle School* were fairly good while similar exhibits from *South Norwood Primary School Croydon* were excellent Sufficient attention is seldom given to map drawing in the primary department of Indian schools The following note appended to Halifax exhibits may afford some guidance to teachers in our primary schools — The maps are struck off and the details are filled in by the boys from the teachers diagram Globes from the *Dacca Normal School* a relief map of the world from the *Lucknow Normal School* and a relief map of

India from the *Silchar Normal School* were all very good Clay models from the *Lucknow Model Middle School* were good and those from Shajahanpur and Silchar were fairly good Cane work and basketry from Croydon, wood work from *Petit Parsee Orphanage, Bombay,* and straw work from Wellingboro were worthy of special attention Manual work exhibits from Indian schools comprised models of paper cutting, paper plaiting, cardboard work, embroidery, wire and bead work and straw work

5 As regards *nature study,* the work done in Indian schools is in close imitation of that done in English schools The following are some of the subjects taken up in Indian schools as compared with those treated in English schools —

Normal School Agra	Teachers College Saidapet	An English School
Frog	A beautiful leaf	Ducks
Rose	The eucalyptus	Geese
Mango	The orange	Flower
Margosa tree	Arecanut	Fruits
	The Jack tree	Insects

6 In the section devoted to *Female Education* the principal English exhibits consisted of children's clothes, dolls clothes and dressed dolls and the Indian exhibits comprised embroidery, woollen caps and socks, dressed dolls and maps, most of the exhibits coming from the *Normal School for girls, Luchnow* Embroidery and drawn thread work were exhibited by the *Girls School, Gobardhan* In the photographs exhibited by the East Bengal and Assam Schools were shown girls school classes at the ball drill, dumb bell exercises, drawing, weaving, painting, singing action songs, acting the story, clay modelling, sewing, map modelling practical arithmetic and school excursions

7 In the *Kindergarten section* children's work from *Woodstock College, United Provinces,* comprised paper folding, drawing embossing, clay modelling, bead work, cane work brush drawing, nature calendar and nature collection It is claimed that paper folding teaches neatness and exactness, drawing teaches position and sense of beauty and lays the foundation for mathematics, and embossing gives steadiness to eyes and hands and thus prepares the child for different kinds of work

The following scheme of work for clay modelling deserves the attention of teachers —

(1) Development from the ball
(2) Development from the cylinder
(3) Tile work
(4) Elongated forms
(5) Free play

The following are mentioned as illustrations used for a lesson on India in an English School —The Taj, The elephant, The Jat, The Himalayas and the Khyber Pass

8 *Seconday Education* —The following scheme of work for English composition adopted in Form VI, in Winterbourne Road Girls' School, may be of interest —

Relating orally and in writing the substance of a lesson

Accounts of visits to places

Accounts of events described by pupils taking certain characters and giving their points of view

Letter writing and answering

Punctuation

Syllabuses for mathematics and geography and relief maps were exhibited by the *Training College, Lucknow* Specimen of drawing from the *Government High School, Pegu, Jubilee High School, Luchnow* and *Government High School, Aligarh* were good

9 Under *manual training,* the clay modelling exhibits comprising models of fruits, birds, beasts and plates of the Governors General of India from the *Jubilee High School, Luchnow,* deserved special notice Wood carving from *St Joseph's High School, Calcutta,* sloyd and wood work from Mussoorie and wood work from

the *Training College Allahabad* and from the *Co operative Sports Works Sialkot* were all remarkably good Science apparatus and appliances were exhibited by the *Punjab Science Institute Lahore* Messrs Hargo Lal & Sons Umballa Messrs Max Kohl Chemnitz and Messrs Reynolds and Bronson Leeds

10 *Industrial Schools*—The *Dacca School of Engineering* workshop *Sir D M P School of Industrial Arts Ahmednagar* and the *Poona College of Science* exhibited models of wood work and excellent specimens of cardboard modelling were exhibited by the *Training College Lahore Fuller Technical School Kohema Naga Hills* exhibited a beautiful chair designed by the Instructor in carpentry Specimens of joinery and model school desks were exhibited by the *American Presbyterian Mission Industrial School Saharanpur* and plans of school rooms were exhibited by the *School of Technology Manchester*

11 *School Gardening*—The following notes regarding school gardening appear to be worthy of notice —

Object of gardening —

(1) To get an idea of seed sowing and the different methods of vegetable and flower cultivation

( ) To obtain a knowledge of—

(*a*) how soil is formed

(*b*) the various substances which characterise a good or poor soil

(*c*) the names of the different plants grown

(3) To provide material for the nature study lesson

(4) The cultivation of the power of observation by noticing the development of the various part

Methods of Instruction—Each class prepares the soil and sows the seed After completion boys make observations during the day and note how long it takes the seeds to germinate

The time is noted on an observation chart provided for each class Vegetables are grown by upper and flowers by lower classes

In connection with nature study boys notice—

(1) insect visits and the work they do

(2) different shapes and arrangement of leaves

(3) change from seed to foliage leaves

(4) formation of seed boxes

(5) weak and climbing stems

(6) shapes of flowers

12 *Drawing and Painting*—Excellent specimens of drawing and painting were exhibited by *Owens School Islington* Exhibits from Indian Schools were not quite true to nature in either colour or form A series of well arranged practical object lesson sheets were exhibited by Messrs Cox & Co

13 *Technical Instruction*—Under technical instruction the following syllabus for instruction in tailoring is deserving of notice —

Lectures—

(1) Origin of dress

(2) Uses of clothing

(3) Evolution of dress

(4) Influence of dress

(5) Materials used in clothing

(6) Animal materials—

(*a*) Where had

(*b*) Manufacture

( ) Peculiarities

(7) Materials from minerals—

(*a*) Kind

(*b*) Where had

( ) Manufacture where and how

(*d*) Properties

(8) Vegetable materials—
(a) Kinds cotton flax jute dye
(b) Where had
(c) Manufacture where and how spinning
(d) Properties
(9) Materials

General knowledge of (a) origin of names of materials, worsted, serge, tweed, etc , prices and cost, qualities, how determined

(10) General effect on the figure of patterns materials and design
Stripes checks cut
(11) The clothes moth
Life and habits

Specimens and illustrations shown wherever possible

Lantern lectures on processes of manufacture, practical tailoring, placed regularly in the shop

PRACTICAL TAILORING —Year I

Stitches used in tailoring

Trousers—
Making quantities required
How to measure styles of trousers
How to draft a pair of trousers
Allowances in drafting
Breeches and leggings
How to measure Drafting
Vests making style quantities required how to measure how to draft single breasted no collar vest

YEAR II

Drafting (Vests continued)—
(a) Step collar (b) Double breasted with and without collar (c) Roll collar (d) Dress (e) Sleeve vest

Lounge Jacket—
As in previous garment
Important points to notice Remedies for defects in fit
Morning coats
Quantities required
Measuring drafting
Points defects and how to remedy

Among the exhibits from technical schools there were specimens of turnery in the *Stanley Technical School*, of wood carving from *S P G Mission School, Ahmednagar*, the *College of Science, Poona*, and *American Presbyterian Mission Industrial School, Saharanpur*, and of carpets from the *Industrial School, Secundra*

14 Under University Education the principal exhibits shown were plans of college buildings and rooms for special classes, note books, geological specimens, specimens of insects, and models of insectivorous plants most of the exhibits being from the biological laboratory of the *Muir College, Allahabad*

15 *School of Arts* —The only Indian institutions that furnished exhibits for this section were the *Mayo School of Art, Lahore*, in wood carving and metal carving, and the *School of Art, Bombay*, in metal work, and carved and glazed pottery

16 In the *Japanese Court*, lacquer ware, bronze work, porcelain, woven garments, embroidery, glass beads, carved ivory work, silks, fans, tennis bats, carved wood chairs screens jewellery, fancy work and photo frames were the most conspicuous exhibits In the *General Industries Court*, leather goods, preserved fruits, sporting goods and medicines were the most prominent exhibits In the *Native States Court* brass work, ornamental papier mache work, and marble work from the *Jaipur School of Art* deserved special attention Excellent steel pens were exhibited by Turnbot Brothers of Gwalior In the *Metal, Wood and Stone Court*,

metal toys from Jaipur locks from Calcutta boxes and steel trunks from Multan inlaid wood work from Manipur carved wood work from Amritsar carved black wood work from Nagina painted wood work from Jalandar and stone work from the North West Frontier Agra Chunar and Mirzapur were of great interest In the *Fine Arts Court* carved ivory and sandalwood work from Delhi and excellent manuscripts with coloured illustrations of great antiquity were worthy of special attention In the *Forestry Court* specimens of wood pulp for making paper from the Himalayan spruce pata wood chirpine the Himalayan poplar and blue pine were the most interesting exhibits Numerous varieties of ropes baskets and mats formed the most prominent exhibits Beautiful garlands made of seeds and bead were exposed for sale at prices ranging from twelve annas to two rupees In the *Ladies Court* chikan work from Lucknow Irish linen thread lace from the London Mission Girls School Mirzapur dressed dolls in great variety embroidery and drawn thread work coloured straw trays and flower baskets were among the most attractive exhibits

17 *General Remarks and Suggestions* —No visitor who carefully looked over the exhibits in the Primary Schools section of the Educational Court could fail to notice that elementary education is beginning to claim and to receive in various parts of India the attention which its importance demands Besides the practising school attached to the Mysore Normal School there is scarcely a Government Boys School in the State in which the same attention is given to young boys that is given to little girls in the elementary classes of the Government Girls Schools in Bangalore and Mysore and in the Mission Schools in some of the District and Taluk Headquarter stations The quality of instruction imparted in most of the elementary vernacular schools for boys is in urgent need of improvement It is felt that the education of the young has come to be the most delicate and difficult of human undertakings and the ideal teacher has been defined as the high priest of the aspiring heart the physician of the soul into whose hands the golden key of evolution is entrusted The abnormal failures in geography and science at the Matriculation Examination may to some extent at least be traced to the insufficient attention that powers of observation and expression have received in early childhood In the first annual report that I had to submit as an Inspector of Schools I suggested the opening at least as an experimental measure of a number of well equipped elementary schools in different parts of the cities of Mysore and Bangalore I would now go a step further and say that in addition to such schools there should be in Bangalore a central model infant school for children below the age of six to which vernacular classes I and II may be attached and a model middle school with five Anglo Vernacular classes The infant school should be placed for at least three years in charge of a skilled European Kindergarten Instructor who may be assisted by an Indian graduate A European expert in educational handicraft should be attached to the middle school for a period of at least five years Training classes for teachers may be attached to these institutions Partly to recover a portion of the cost of maintenance and partly to control the admission of pupils a uniform fee of eight annas or a rupee may be levied in the elementary school and the fee in the model middle school may be fifty per cent higher than the fee in ordinary middle schools These schools may appear to be expensive but it will I believe be readily conceded that they are as essential to educational progress as well equipped colleges and high schools

Conclusion —In this brief report I have endeavoured to give special prominence to certain useful suggestions schemes of work and detailed courses of instruction More complete information of a general nature regarding the Educational Court will be found in the printed Handbook attached to this report and in the special articles contributed by visitors to the *Madras Educational Review* for December 1910 and the *Indian Education* for February 1911

I have the honor to be
Sir
Your most obedient servant
C KRISHNA RAU
Director

REPORT ON THE U P EXHIBITION ALLAHABAD 1910 1

REPORT ON THE U P EXHIBITION ALLAHABAD 1910 11

As per Government Order No 5830 2—Edn 187 10 2 dated 21st December 1910 I visited the United Provinces Exhibition Allahabad from 1st to 6th January 1911 inclusive My stay in the place being limited to only six days attention was specially directed to the Educational section of the Exhibition Typical Exhibits of Fine and Applied Arts Agriculture Forestry and other industries having a bearing on Education or an Economic value in general were observed with care

In respect of the historic and religious importance of the grounds chosen the abundance and richness of the materials collected the suitability of the season fixed on and above all the excellence of organisation and order prevailing throughout the United Provinces Exhibition ranks as the most splendid show of the kind ever held in North India In the words of the Committee of Management the main object of the grand undertaking was To display in one small Cosmos what Eastern experience hoary with the wisdom of centuries can suggest what Western Science rejoicing in the energy of highly trained brains can evolve and the golden heights to which the combination of these two forces can elevate mankind How to ameliorate the economic moral and intellectual condition of the United Provinces in particular and that of India in general was the aim and purpose of the magnificent Exhibition evolved in the master brain of His Honor Sir John Hewett the Lieutenant Governor and brought into existence by the patriotic enthusiastic and combined efforts of the Chiefs and people of the United Provinces The preparations of the Show have cost over 13 lakhs of rupees of which three and a quarter lakhs have been subscribed by the people themselves Over 3 000 000 visitors must have passed through the various sections of the Exhibition during the period of its operation

Allahabad so called by Akbar the greatest of the Mogul Emperors is Prayag for Hindu pilgrims Situated at the confluence of the Ganges and the Jumna it bears the proud title of Tirthraj the holiest of holy places Prayag is mentioned in the Rig Veda the earliest religious record of the Aryan race The Exhibition Committee have taken full advantage of the sacred character of the site and have included the annual bathing festival called the Magh Mela within the period of the Exhibition which remained open from the beginning of December 1910 to the end of February 1911 On the charming bank of the Jumna the fenced in Exhibition grounds covered about 120 acres and priceless products of several Arts and Industries were beautifully displayed in fine brick built courts laid out on a uniform plan and resembling a series of handsome oriental palaces The Government of the United Provinces have provided three of the most important Courts namely the Agricultural the Forestry and the Educational at an estimated cost of two and a half lakhs of rupees

The following are some of the unique and interesting features of the Exhibition —

(1) The presentation of all the representative industries and arts of India in a way enabling visitors to make instructive comparisons between the working of the latest machinery and the simple primitive methods of the small handicraftsmen

(2) The intimate association of products and processes and the demonstration of actual working processes by skilled artisans in the stalls at the main entrance as well as in some of the annexes

(3) The holding of a series of competitions to test improvements in the looms of the village weavers tending to diminish labour and give a better out turn of work

(4) The display of finished articles of British, American, and other foreign manufactures side by side of those made in India

(5) Ample accommodation in tents for visitors of all communities, with electric lights and facility for supply of hot water, last but not least, sports amusements, and other social amenities which formed the chief attractions for the great gathering

Fine and Applied Arts

The place of honor in the Exhibition was deservedly occupied by the Fine and Applied Arts Courts The different periods of Indian Sculpture from the early Buddhist up to the present time were presented by Photographs and some stone and bronze images As examples of decorative sculpture of a high order, good specimens of the Taj Mahal and other Moghul buildings at Agra were on show It is strongly to be desired that a Nationalist School of Indian Art in Mysore will make fine models of the famous Belur and Halebid Temples supplying an inexhaustible wealth of design, beauty and taste It is stated that "the jewellery of India has great variety, interest and beauty It is in itself a key to the whole Art, History, Culture, Social and Religious, of the country We pass from the heavy but well designed base metal ornaments of the primitive tribes to the beautiful and infinitely varied silver peasant's jewellery, of which a typical series from Amritsar is exhibited From this one may turn to the fine wrought gold work and encrusted gems of Southern India, or the delicate and splendid enamels of the north" The high value of the workmanship as compared with the intrinsic value of the material is one of the most interesting features of the jewels exhibited

Hand woven textiles of beautiful materials, such as the finest muslins ('woven air") of Dacca, could not be produced now, owing to change of taste and other causes such as the introduction of aniline dyes and demand of cheaper production But the cloths of gold and silver brocades of Benarese and Ahamedabad as well as the fine woollen Kashmir shawls produced at the Exhibition were worthy of notice The old method of dyeing is said to be maintained only by a few carpet manufacturers in Agra and Amritsar and a few Jails in Native States, such as Bikanir Since the beautiful and permanent effects of the older dyes cannot be excelled by costly aniline and alizarine colours made in Europe, it is decidedly in the interests of true art and economy to revive the old art of dyeing Fine samples of cotton printing were exhibited from Masulipatam The interesting method of tie dyeing as practised in Rajaputana and Guzerat may be introduced into some of the weaving schools in the Mysore State, and "Bandana handkerchief with its spotted effects produced

Embroidery—There are different varieties of Indian Embroidery, of them the white "Chikan" work of Lucknow is the finest, consisting of various kinds of lace work in cotton, silk and applique on fine muslin Some excellent samples of such work are available in Mysore City and other large centres of Mussalman population in the State Improved methods of embroidery on cotton cloths, shawls and leather may be introduced into Hindustani girls' schools with much benefit, in so far as Mahomedan ladies show a strong predilection to embroidered garments, chaders, bed covers and other articles of a domestic character

The finest examples of ivory carving were exhibited from the School of Arts at Trivandrum The Trivandrum ivory workers are recognised to be the best in India especially for figure work The "Gudigars,' hereditary sandal wood carvers, of Mysore are famous for the delicacy and beauty of their works, but all the subjects are generally taken from Hindu Mythology There is ample scope for improving the technique and taste of their art of carving

Wood, Stone and Metal Court

A visitor to the Court would be struck with the large number of wood exhibits from Saharanpur and Nagina The Saharanpur section contained excellent articles of repousse brass and copper ornamentation laid on *Shisham* wood The ebony work of Nagina, a small town in the District of Bisnor, was peculiarly fascinating as a minutely cut and intricate pattern The Nagina ornamentation is used for the most varied articles, such as screens, easels, walking sticks, mirror

frames Koran reading stands trays pin boxes etc From Fyzabad were represented fine boxes writing desks and jewel cases made of *Shisham wood* with brass decorations hammered into the wood

The Tarkashi of Manipuri is another noteworthy industry This takes the form of brass wire impressed upon wood the pattern is grooved into the wood and into the groove brass wire is hammered The effect is of singular delicacy and beauty the patterns being of the most intricate description the effect of which is enhanced by their very fine and delicate lines

Indian Architecture as well as Sculpture is a living art but it is stated to be in danger of degenerating if not being destroyed by bastard European imitations in a reckless disregard of all recognised canons of ornament and proportion

Beautiful inlaid flooring slabs and an alabaster lamp were displayed by the *Agra Marble Works*

Brass and copper ware —Very beautiful brass vessels with narrow necks of *Kosa* make were on view Metal images of real artistic merit were produced from Muttra The brass work of Benarese and Moradabad deserves serious attention with a view to its adoption in large centres of metal hollow ware trade in Tumkur and Hassan Districts containing a large number of Bhogars hereditary workers in brass and copper The Benarese work consists of engravings mostly of mythological subjects on a flat surface all the space intervening between the figures being filled in with a series of minute patterns mostly geometrical A fine specimen of this work will be found in the reproduction of a temple The Moradabad work on the other hand consists of engraving a series of minute and intricate patterns mostly arabesques and throwing them into relief by filling in the engraved pattern with colored lac When this work is done with due attention to detail and is well finished it is most effective A special variety of inlaid or overlaid metal work is known as *Bidri* from Bidar in the Deccan This material consists of black alloy of tin zinc lead copper etc damascened with silver In nearly all of this work the designs particularly the poppy pattern and various geometrical designs are very beautiful (The quotations are from the Official Handbook of the Exhibition)

General Industries Court

The leather products of Cawnpore formed a superb display The chrome leathers buffs for kavalies sole leather morocco skins and hides for upholstering chairs and carriages all exhibited by the Mysore Tannery Ltd were of special interest to every Mysore visitor The chrome sole leather rendered water proof by a special process is valued very highly The black harness sides produced by a Combination Tannage that is both chrome and bark elicited admiration on all hands The company has a great future before it It is to be devoutly wished that a few intelligent young men of hereditary leather working communities in the Mysore State such as Mochigars and Madigars will be deputed to learn the improved methods of tanning and working in leather

Pottery is another important trade which needs early development on scientific lines The Nizamabad Pottery in Azamgarh District is a black and reddish brown ware adorned with designs in silver foil After the baking silver foil or an amalgam of mercury and tin is rubbed with the thumb nail into lines etched with a sharp instrument on the unbaked ware The articles produced are chiefly tea pots sugar bowls candle sticks vases goblets etc The prices are very moderate The designs in silver are durable The floral designs stand out in a pleasant relief against the black ground The Peshawar Pottery is much glazed and painted but it is not so rich in designs as the Nizamabad work It is somewhat of faience type

Perfumes and the allied trades of oil soap and chemical manufacture were largely represented The exhibits of North West Soap Company and of the Kaisar Soap Manufacturing Company attracted considerable attention Improvements in the blending of *dried* perfumery and the preparing of otto de musk and otto de amber are claimed by Amir Mohammed Khan Ghilzai Lucknow and Calcutta The study of improved perfumes must be keenly interesting to many scent manufacturers in the City of Mysore which has no mean reputation in the trade

Native States Court and Oudh Hall

Among all Native States in Northern India, Gwalior had sent the largest number of exhibits representing various industries and crafts Education in the Gwalior State is more practical than literary "The mining department of the Gwalior Government has a well equipped up to date laboratory where samples of minerals are assayed and their chemical composition, economic value, etc , explained The Technical Institute of Gwalior produced good iron safes, tin despatch boxes, trunks, and air tight tin cases Clay figure and fruit making and terra cotta pottery were its speciality First vegetable dyed woollen carpets of good design and finish came from the Gwalior Carpet Factory, Carpets made of Akowa Vegetable Silk and of plush texture were remarkable "The Historic Chanderi Muslins, hand woven, are renowned on account of their exquisite fineness and excellence of manufacture, as well as for the blending of gold and silver threads in the weaving of the muslin They are to be had in both silk and cotton and either with or without gold or silver thread and in a variety of delicate shades and colours They are specially suited for saris, handkerchiefs, dhotis, puggrees and ladies dresses From the Gwalior Nib Factory excellent nibs of all varieties were sent The Scindia Type Foundry showed exhibits of type cast on the point system, the type requiring no rubbing The Scindia Paper Mills displayed various sorts of paper Sandstone capable of intricate carving and design was exhibited by the Superintendent of the Gwalior Stone Quarries The Jaipur State Museum and School of Arts sent typical exhibits of their art work in metal, precious stones, tinsel, potting, lacquer, papier mache, etc The Oudh Hall collection contained zardozi articles, made of velvet or silk embroidered with gold or silver threads, as well as Chikan work embroidery with cotton thread on fine muslin for which Lucknow has always been famous

The Educational Court

The chief object of the Exhibition being "to encourage the Arts and Industries of the United Provinces," the Educational section naturally presented such exhibits as have a direct bearing upon the arts and crafts of the country "What field more than Education, in all its aspects, can claim to mould the faculties of man as an industrial being? Because Education, especially Scientific Education, is the corner stone of every factory and mill, it is meet and proper that Education be included in the greatest Exhibition yet held in India' Indian Education has been denounced as literary and defective The Exhibition in a splendid way demonstrates how the efforts of Educationalists can be rendered practical and useful

The Court, built after the Indo Moslem style, occupied a prominent position facing the popular Ladies' Court and close to the left bank of the Jumna "The visitor on entering the Court finds himself in the Central Hall which is given up to Female and Primary Education On either side of this room are various halls, those on the left being for Secondary Education and Commercial exhibits, those on the right for University, Industrial, Oriental and Art Education, and for the work of Agricultural Colleges, Commercial Colleges, Reformatories and Schools for Defective Children' The exhibits are drawn from all the provinces of India and for comparison with these a collection covering all branches of Educational work, has been secured from the Board of Education, England the Manchester Education Committee, the School Board of Glasgow, the Northampton Country Court, the Ladies High School, Cheltenham, the Christian Brothers Cork, and many other Educational Institutions in the United Kingdom

The education of girls in Eastern Bengal and Assam was illustrated by 95 photographs on a large screen in the Hall The photos represented the various branches of school work starting from the lowest stages and culminating with the highest yet reached The condition of an ordinary village girls school is thus described —' Furniture and apparatus are limited No girl will remain in the school after the age of nine or ten The school mistress's qualifications are slender, but nevertheless some insight into the world of books is being gained by the little pupils" Excepting a few Mission Aided Schools, no plain sewing was taught systematically in any girls school Weaving and spinning classes were an interesting feature in the girls schools of Manipur There were photos illustrating

cooking class and girls cooking A hope is expressed that cooking and sewing on approved lines will form an essential part of training to be given in every public school for girls The Kindergarten and Nature study exhibits were highly interesting and suggestive The photographs and works of English Schools such as Blackheath High School London Cheltenham College and the Schools of Halifax and Manchester represented the education of girls in its most up to date developments The scheme of work in Winter Bourne Road Girls School in addition to literary subjects included a special two years course for experimental housework needlework drawing clay modelling cane weaving cookery and singing A model girls school of the type if established in every important town of this country will assuredly further the progress of female education of a practical and popular character

The exhibits of Primary Education contained models to illustrate object and geography lessons The object lesson cards of the Normal School Agra and the Training College Poona compared favourably with those sent by the London Board of Education The illustration of a moral story in free cutting formed an attractive frieze in the Primary Section This kind of work being simple and inexpensive might be introduced into all Primary classes as it serves to train the hands and eyes of infants in an admirable manner Aston Cote Elementary School has a well thought out scheme for rural education a copy of which is appended to this report In the interests of the children belonging to agricultural communities in the Mysore State the opening of a few model rural schools deserves serious consideration in the nearest future

In the Hall for Secondary Education Exhibits of manual instruction in wood and clay were arranged and they were a poor show in comparison with Sloyd Exhibits obtaining in the State schools of Mysore But the correlated scheme of drawing and manual instruction prepared by the Higher Grade Training College Allahabad for the schools of the United Provinces was really noteworthy Excellent clay models of the Governors General of India were forthcoming from the Jubilee High School Lucknow Nature study notes and exhibits were most instructive and attractive As examples of neat and careful work in which observation experiment drawing and composition are all called in to encourage the pupil to express his interest in different forms the notebooks sent by the schools of Craydon England are worthy of special attention Excellent collections of grasses as well as splendid drawings of flowers and plants were sent from Lilford School Exhibits of School Gardens as a development of Nature study formed another notable feature of Secondary Education

The exhibits of drawings photographs schemes of work and notebooks sent by the Education Committee of the Wilts and Bucks County Councils England will show teachers to what extent the subject can be made educational in its presentation and at the same time lead to strictly useful results It is a great pity that drawing is not made a compulsory subject in the curriculum of all Secondary Schools in India So the best specimens of brush work geometrical drawing designs and drawing from models from Indian Schools were inferior in comparison with the similar exhibited collections of British work

Generally the method of teaching History and Geography in Indian Schools is mechanical and uninteresting The notebooks historical maps charts and models on exhibit suggested to practical teachers how interest might be roused in handling such difficult subjects as English Science and General Knowledge Copies of schemes and general notes on the methods of teaching as adopted in the Council School Halifax are appended to the report

Under Secondary Education the scheme of Ambulance is included Syllabuses of teaching charts of aids and reports of the Central Executive Committee St John Ambulance Association were all exhibited Since a Branch Association has recently been inaugurated in Mysore City under the patronage of His Highness the Yuvaraj it is earnestly desired that Ambulance Teaching will at no distant date become a special feature of Secondary Education in the State

In the University Education Section there were a few photographs notebooks on Science Physical and Chemical Science Apparatus made in the Laboratories and Workshops of Colleges The Muir Central College Allahabad sent a serie

of Museum specimens from the Biological Laboratory illustrating methods of preparation and mounting, and some typical examples of Indian Fauna" An exhibit of special interest in the University Section was a series of coloured illustrations of Insect Life produced by the Imperial Entomologist at the Pusa Agricultural Research Institute In each case the complete life history of the insect was shown Of Provincial Universities of England the University of Leeds must be most attractive to Indian Students, since its prospectuses as exhibited indicate various branches of study like Medicine, Dentistry, Agriculture, Social Economy, Dyeing, and Leather work, in addition to the usual Faculties of Arts, Science and Law

Industrial Education was exhibited by a large variety of articles made by boys of different Industrial Schools From A P M Industrial School, Saharanpur, came sets of lessons in joinery and wood carving, carved door and frame, inlaid box swivel black board, despatch box, chairs, school desks, boots and shoes The Technical School at Brindaban sent a very pleasing exhibit of pottery and tiles made in the school, as well as some rugs and wood work The Stanley Technical Trade Schools, London, had sent many typical exhibits of metal work, wood work, shoe making, and tailoring The notebooks, drawings, and syllabuses sent by the Board of Education were specially interesting to all teachers of Trade Schools

The exhibits of the Oriental Educational Section consisted of rare manuscripts, photographs and instruments used in indigenous methods of teaching medicine and science, as well as those illustrating the orthodox method of teaching Sanskrit and Arabic and of religious instruction as carried on in the Monasteries of Burma and Ceylon Several ancient works of Arabic and Sanskrit learning were shown, including translations in Persian from the original Sanskrit by Abulfazl and Faizi, the well known poets of and ministers of the Emperor Akbar, as well as the "Babarnama," or autobiography of Baber, which contains many pictures painted by famous painters in Akbar's service "Prithi Raj Rau a history of the reign of King Prithiraj by the celebrated poet, Chand, in Hindi verse, written about 300 years ago was an important exhibit There were also an old copy of the "Mahabharat" valued at Rs 50,000, and an Urdu translation of 'Srimad Bhagavath' said to cost Rs 25,000 Both the works were in caligraphy and fully illustrated

Art Education was represented by exhibits of the Schools of Art, Bombay and Lahore, including well designed cabinets containing pottery, brass, copper and silver articles, with a good selection of woollen rugs and some excellent architectural and other studies upon the walls Striking exhibits in the Bombay Collection were a pair of handsome wrought iron gates decorated with panels of beaten brass and glazed earthen vases of refined designs and finished workmanship The latter were the first fruits of the research work carried on in the recently established Pottery Department of the Bombay School "Architectural drawings are made a feature of the training in the school, and one of the designs displayed was awarded a prize of Rs 2,000 in Calcutta, and is the work of a student in the Architectural Class" On the walls of the Art Section were exhibited some choice works of students from the Art School of Manchester and the Francis Hallan School for Girls, London From the Lahore School came a carved teakwood fireplace and a second carved fireplace of Shisham wood excellent in design and work A box of silver repousse work and a hanging lamp valued at Rs 550 showed what was being done in metal in the school, while sample of plaster ceiling and decorative painting over the arches of the room gave an idea of the comprehensive nature of the instruction given A scheme of the school work was also on view

The Commercial Education Section had an extensive exhibit of advanced commercial instruction in all branches including specimens of typewriting and shorthand, from St John's College, Agra, and pamphlets sent by the Byramjee Jeejeebhoy Parsee Charitable Institution, Bombay, giving the History of Development of Higher Commercial Education

The system of "Urdu Shorthand" prepared by the Department of Commercial Education, Reid Christian College, Lucknow, deserves special mention in view of its adaptation to other Vernaculars in the Continent of India

The Agricultural Section contained photographs, syllabuses, and schemes of work from the Agricultural College, Cawnpore, as well as exhibits sent by several English Agricultural Colleges including the Midland Agricultural College, the Red

hill Farm School Survey the Horticultural College of Swanley and the Agricultural College of Newport Fine models of agricultural instruments and rare specimens of plantation were also displayed The City of Bangalore with its salubrious climate and its flourishing Botanical and Fruit Gardens is best suited to develop a Horticultural College like that of Swanley in Kent

Education of defectives.—Among the innumerable benefits conferred by the British Rule in India the unique system of training physically or mentally defective children takes a high rank The Industrial School for Christian Blind Rajpur sent knitted articles Munj matting books and apparatus for teaching the Blind while from Calcutta Deaf and Dumb School came exhibits of hand woven cloth wooden and clay articles The London Board of Education had sent copies of Regulations applicable to schools for Blind Deaf Defective and Epileptic Children An interesting series of card showing the courses of studies carried out in the schools for Infirms or Defectives were also exhibited The schemes of rug wool Raffia work and grass plaiting on the lines suggested by the London County School will shortly be introduced into the schools for Deaf mutes and the Blind Mysore which is in a progressive condition under the benign fostering care of His Highness the Maharaja's Government

Ladies Court

All the exhibits were the work of ladies The aim of the Ladies Committee was to bring together a representative collection to illustrate what has hitherto been done and to show what may be done by well directed efforts in the future There was a display of fine chikan work consisting of various kinds of lace like needlework in cotton silk and applique on fine muslin and representing some of the finest artistic embroidery now done in India The Rani of Kharagarth had sent samples of darning on net There were some beautiful examples of embroidery from Amraoti Female Normal School and from Travancore while the Bareilly Girls Orphanage sent some interesting crochet From Sultanpur the Girls Orphanage exhibited some beautifully executed drawn thread work on cotton and linen The blue linen was particularly attractive The *Munj* work done by Thakur women of the villages showed great taste and skill Other exhibits included lacquer ivory and silver bead work The Doll room contained a large collection of dolls representing scenes and costumes of Indian life in all parts of the country There was one noteworthy contribution by Her Highness the Begum of Bhopal The series of dolls representing the Rama Lila Procession was lent by Rai Bahadur Singh Talukdar of Kheri District The Bhavnagar Princess sent some magnificent pieces of gold embroidery and phonographic records of her playing on the sitar There was a picturesque assortment of Hindu wedding group of dolls some handsome clay models wonderfully clever artificial flowers and curious pictures made from colored shells rice and fish scales From Ghorakhpur came exhibits of fancy basket work There was an interesting large model of a Hindu house in Northern India the work of a Dehra Dun contributor and it was marvellously executed with courtyards rooms furniture and figures of the inhabitants even down to the comfortable cat on the parapet complete The artistic representative collection of products in the Ladies Court did prove beyond all doubt how the individual efforts of even pardanashin ladies could be utilised under a little wise and sympathetic guidance in the furtherance of the Educational and Economic progress of the country

Medical and Hygiene Court

This Court was very interesting and instructive The exhibits were divided into six sections including the recent developments in Radio Electricity illustrations of Common Indian Diseases Malaria Plague Cholera Consumption —and of Rabies and snake bite—with their causes and methods of fighting them the preparation of drugs for the medicine chest and for the market process of making calf lymph and purifying water with sanitary models indigenous drugs and medicinal preparations The Official Handbook says that the majority of early workers *with X rays have contracted dermatitis* and a few have lost their lives from cancer as a result of their researches But the reason why these pioneers have suffered is that at first no one realised the potency of the ray and men constantly

exposed themselves for hours daily to its direct effect The danger is now fully realised, and with modern protective methods (examples of which are shown) and in the hands of a skilled and careful operator there is absolutely no risk of X ray burn for the patient, and very little serious dermatitis for the operator How the malarial infection is brought about by a particular species of mosquito, in which on microscopical examination the malarial parasite is found to be flourishing, was illustrated How to differentiate between poisonous and non poisonous snakes by examination of their scales according to Wall s method, was shown by diagrams On Tuberculosis and diseases of the various portions of the body set up by Tubercle Bacillus, most commonly the lungs and popularly termed consumption, diagrams charts, and sketches were shown Consumption being a preventable disease, a leaflet giving the means of prevention and indicating the method of dealing with the same was distributed gratis to all visitors Various substitutes for food which might be used by Indians in times of famine were on view The method of using mosquito netting as a protective against fever was shown by models The manufacture of quinine was illustrated by specimens of the various barks from which it is extracted, the different salts produced and the various forms in which it is put up for administration The fish known as "Millions and other mosquito eating fish were exhibited in tanks For the mineralogist and prospector a new type of prospecting outfit (Way s pocket smelters) which identifies and defines with approximate accuracy in an hour the metal values of ores was displayed The 'Auto Spray for spraying disinfectants was an interesting apparatus There was a special stand for sanitary fittings and accessories including lavatory basins, baths, fire clay sinks and water closets (with the "Hindustan patent water closet specially designed to meet the requirements of natives of India) Sanitary appliances for Municipalities, latrines, conservancy and water carts of improved design were all on exhibit

The Engineering Court

This Court was of much interest to the specialist, as it contained working models of the latest engines and pumps Most importance was attached to the recent developments in driving machinery by means of electric energy There were conspicuous exhibits of general interest like incandescent lights and fans with *Khas* Tattis attached worked by kerosine oil All kinds of building materials were on show Non conducting mica composition for boilers and live steam pipes, Tarbia for surface dressing and allaying dust on roads, and alumino ferri, a compound specially manufactured for purifying water deserved special notice Among modern lighting appliances the two illuminated electric fountains on the Exhibition Grounds were most fascinating The "Vortex' Humidifiers for the mechanical humidifying of the atmosphere in Factory Buildings to facilitate textile works, and steel armoured wooden fire doors were also shown The Shalimar Paint, Colour, and Varnish Company (Calcutta) showed samples of their manufactures and decorative and protective examples of the effects of their paints and distempers In the Carriage Section the type of tonga in use at Peshawar with rubber tyred wheels was exhibited

The Textile Court

Next to Agriculture the greatest industry of the United Provinces is *weaving* According to the Official Handbook "the Textile industry has been carried on from time immemorial in these Provinces, and the use of improved methods and modern appliances in mills and factories now dates from a period beyond the recollection of the oldest living inhabitant of the Provinces whether the cotton, woollen, silk or worsted trade is in question Still there is much vitality in the village hand loom weaving industry, and of this with the factory production of textiles the main building of this section contains a representative collection of examples' Signs of a promising mill industry are not wanting in these provinces The Elgin Mills Company founded as long ago as 1862—the pioneer of the cotton mill industry in the United Provinces—exhibited a complete collection of working machinery of the latest types, showing every process through which the raw cotton passes until it is turned out in beautiful cloths The Cawnpore Cotton Mill Co , Limited, had a group of working machinery including some of the most

recently designed looms for ornamental work The specialities woven by these mills were Kakoni towels miniature tents cotton blankets and rugs with a raised finish giving them the appearance of wool The Cawnpore Woollen Mill the first of its kind in India displayed a large variety of Lalumli pure wool manufactures and several looms and braid machines at work The woollen mills of Dharwal Punjab were characterised by an extensive range of patterns in all their different kinds of fabrics especially in flannels of various stripes and colours The Dharwal shawl and checks (of beautiful design) in a great variety of qualities and in almost every colour and shade drew much attention The United Provinces have justly attained a premier position in the manufacture of tents like fittings and camp necessaries

Hand loom weaving —What is of greatest interest from a humane and economic point of view is the endeavour made to promote the hand loom industry by establishing the Hewett Weaving School at Bara Banki The Industrial Survey of the United Provinces has shewn that about half a million of the population therein earn their living by hand loom weaving while another half a million are dependent on the actual workers It is estimated that in spite of mill competition the quantity of cloth woven by these people is no less than thirty million pounds a year Here is an industry which is still struggling hard for its existence but supporting one million souls and that in spite of thirty years crushing competition with mill work Sir John Hewett in his opening speech has said that even in the workshops of Europe hand loom weaving remains a profitable industry and here in India it is the most important industry in the country next to agriculture The lot of a village weaver is a sad one all over India Deeply sunk in ignorance poverty and prejudice he has to eke out his livelihood from hand to mouth The remedy consists in improving his earning capacity As His Honor the Lieutenant Governor has remarked the weavers at present are at a disadvantage owing to a lack of organisation information and instruction The Government of the United Provinces have made an affort to persuade the weaver class to take up hosiery production Knitting is an industry closely allied to weaving Since the ideas of comfort and living have risen notably among the middle classes of people the demand for knitted goods is on the increase The manufacture of hosiery is a typical cottage industry and it does not need a large capital It is said that most of the cotton hosiery now used by the middle classes in India is made in Japan from coarse cotton grown in this country So a hand industry of the sort can be made successful if started on proper lines The Students Economic Hosiery Calcutta showed their automatic stocking knitter in the Court hall This machine will automatically knit stockings with splendid heel and toe and double sole all in one operation This is a very simple machine of its kind and is suitable for factory purposes The Economic Hosiery had also on view a hand knitting machine for knitting plain and ribbed and also fancy socks stockings and cycle hose etc This machine is useful both for cottage industry and for factory purposes

The village methods of weaving as adopted in the chief centres of textile industry Mau and Mubarakpur are fully described in the Official Handbook The actual process of weaving demonstrated in the artisans stalls were worth the careful study of every practical weaver The weavers in both the towns are exclusively Mahomedan converts called Julas The looms used are country looms The machinery is extremely simple and the wonderful designs the weaver turns out are directly the results of his own superior skill The special feature of the Mubarakpur weaving was *tassar* cloth formerly but now the weavers have learnt the art of cotton and silk union Some excellent satin is produced by them The warp is almost always silk the weft being cotton thread or yarn In superior designs yarn of 80 counts or higher is used which is locally known as pechak The industry is said to have developed on the lines of the caste system

Agricultural Court

The underlying principle in the organisation of the whole Exhibition *viz* the intimate association of products and processes of the more important products and the manufactured articles has been kept in view throughout the Agricultural Court An attempt has been made to bring together agricultural produce (in the more restricted sense of the word) improved cultivating implements machinery for converting the raw produce into articles of commerce, and the

finished products' The Agricultural Courts covered nearly one third of the area of the whole exhibition Under agricultural machinery fibre extractors of improved design were exhibited together with a variety of grinding mills of different types dealing with such widely dissimilar substances as stones chemicals, and cereals Messrs Schwertz & Sons showed a "Java Pony Plough' priced Rs 12, and a three furrow plough capable of ploughing 13½' deep by 33' wide There were two small ploughs on the same pattern as the Meston and Wattes types suited to Indian conditions Of agricultural products, wheat occupied a foremost place, specimens of all noteworthy varieties being shewn Pure types of wheat grown on the farm at Cawnpore were placed side by side with samples obtained from the districts for purposes of comparison How a mixed sample of wheat is a nuisance alike to the grower, to the dealer, and to the miller, was illustrated The luxurious growth of the Cawnpore plants was entirely the result of proper cultivation and not of high manuring The exhibits of the Sisauli Seed Farm, Muzaffarnagar, showed the importance attached to the supply of pure seed in scientific agriculture

Cotton —Next to wheat, cotton is one of the most important crops in the United Provinces The Botanical section, Department of Agriculture, Cawnpore, has devoted particular attention to the growth of the cotton plant Two distinct groups of cotton—the Asiatic and the Vilayati—were exhibited together with a few of the crosses obtained in a pure condition during the course of the work The behaviour of the characters of the flower and leaf color, when crossing as well as the breadth of the leaf lobe as another character when a short is crossed with a long stapled type were all illustrated by drawings and photographs The Economic Botanist has by cross fertilisation bred and established new types of cotton which are suited to this country, and are superior to American cotton in point of cultivable quality and economic value The pamphlet entitled "The Problem of Cotton Improvement in the United Provinces' deserves a wide circulation The exhibit of cotton seed oil and cotton seed cake represented a new industry of extreme importance not only to the United Provinces but to India in general There was a production from Messrs Beg, Southerland & Co , called 'meetameal'— a new horse and cattle food—prepared entirely from Indian waste products Ground nuts are introduced into the Central Provinces Experts say that the oil which the nut yields is second in value only to olive oil , and that a ready market exists in Europe for both the seed and the oil

Eri Silk —Eri silk is reckoned as a profitable cottage industry, since the castor on which the worms feed can be easily grown In the State of Mysore with its congenial climate Eri silk worms can be reared not only in every centre of seri culture but also in connection with each school garden In the Eri silk house on the exhibition grounds the cleaning of cocoons, spinning, and weaving on a country loom were shewn in operation by a weaver of the Hewett Weaving School, Bara Banki The continuous Eri silk spinning machine designed at Pusa and a new machine for twisting Mulberry silk called for particular attention

The model Dairy and the Sugar factory were of considerable interest

The Irrigation Court was very pleasant to visit There were working models of canals and weirs, and some fields were being actually irrigated

Forestry Court

The Forest Section was an admirably representative one The display of the principal timbers of the United Provinces and specimen articles made from them, together with samples of other important timbers useful in developing industries was well matched by the splendid show of shooting trophies Hand specimens of each kind of wood with its bark on, and shewing the color of heart and sapwood were on view for expert examination There were a few timbers of special value like sal, sain, deodar, and sisso—a beautiful wood much appreciated for carving and inlaying with ivory Samples of famous timbers peculiar to other parts of India including sandalwood from Mysore were in the collection

The most prominent feature in the centre of the Court was the jungle scene including a tiger seen charging out of the grass in one corner, while in another a panther was observed in the act of stalking a spotted deer Many smaller beasts were also included, such as langoor, a bear cat, and two panther cubs, while numerous small birds were scattered over the branches of the trees, giving the

whole scene a most realistic appearance Among Shikar trophies were found fully set up a magnificent Kashmere stag and two fine gond heads the finer of which was shot by Miss Hewett in addition to a massive sambur head and a beautiful gond with 26 points Lady Hewett had sent a fully set up bear which with another from Kunwar Bharat Sinha held electric lights on either side of one of the central arches Of miscellaneous exhibits the most curious and interesting were a buffalo calf with two heads set up complete the head of a cobra dissected to show the poison gland collections of blood sucking insects and rodents harmful and harmless, a crocodile skull with a caseful of women s ornaments found in its stomach an aquatic museum and a large collection of edible forest produce and medicines

The question of possible industries that may be developed from forest products is of vital importance The following suggest themselves for serious considera tion —

(*a*) Whether timbers of lesser importance now used only for firewood cannot be used for better purposes if the wood is rendered impervious to the attacks of white ants by a paint or preservative

(*b*) Can pulp for paper making be manufactured from them Close to the Forestry Court there was a paper pulp Laboratory fitted up with neces sary apparatus and plant for the investigation of the paper making values of woods grasses and other forest produce at present of little or no commercial value The results of the research work are awaited with keen interest

(*c*) Another forest industry which appears to promise handsome profits is the manufacture of matches There was an interesting exhibit from Amrit Match Factory in the Central Provinces showing the whole process of match making from the tree to the match A glass case contained 42 different varieties of United Provinces timber certified to be suitable for match making by a Berlin firm of experts There is a great future before this indus ry if only a firm of sufficient enterprise can be found to start a factory equipped with modern match making machinery

(*b*) There was a large collection of toys from Benares indicating the woods from which they are made The production of tannin extract from barks the manufacture of wood spirit as a substitute for petrol and the development of toy manufacture and of fibre and lac industries—all these are possible fields of indigenous enterprise suggested by the exhibits in the Forestry Court

Of the minor forest products there was an interesting display of a large variety of ropes shewing what fibres and grasses could be utilised for the purpose in addi tion to those already in common use A selection of canes and grasses were exhibit ed together with different kinds of baskets and mats made from them Some fruit baskets made on the models of those in use in England were on view along with the basket manufacturing machine English fruit baskets could be used again and again and small quantities of picked fruit could be sent in them with perfect safety

Sports and Amusements

As for sports pastime and amusements there were any number of them The Exhibition was remarkable for being the scene of the first aviation meeting held in the east Two professional aviators gave demonstrations of flights during the whole period of the Exhibition There were two aeroplanes for which garages or sheds were built close to the polo ground The display of the flying art was the most popular attraction provided at the Exhibition

The art of wrestling as the national sport of India received special encourage ment from the Amusements Sub Committee It is said that the science of Jiu jitsu under the name of Binot was once extensively practised in Northern India But during the last century this science died out except in Rohilkand wherein a few expert Binotis are still found At present the Punjab claims all the first class wrestlers including Gama the champion wrestler Since wrestling includes physical training it is necessary to stimulate and revive public interest in the

sport A suggestion is made that every school in the country may possess an *Akhara* or wrestling arena Mysore has an historic interest in maintaining and developing the science of wrestling

In conclusion, it may be stated that the chief desire of the United Provinces Government in organising the grand Exhibition, namely, to promote Education, General and Special, and to stimulate a spirit of co operation for public good, has been successfully achieved It is my humble wish that the above account of my short visit to the Allahabad Exhibition may prove of some value at a time when a vigorous movement for economic progress in this State has been graciously inaugurated by His Highness the Maharaja, whose paternal solicitude for the material and moral advancement of His Highness s loyal subjects needs no comment

APPENDICES

English Scheme

Introduction —The teacher will make note of the commonest error in speech and in spelling and will miss no opportunity of correcting them The teacher should remember that Every lesson is an English lesson A quiet but distinct tone should be cultivated throughout by teachers as well as by scholars and the teachers should as far as possible refrain from repeating the answer given by the scholars as this habit encourages lovenliness of speech and inexact and incomplete answers The devices among others will be adopted for obtaining fluency and readiness of speech —

(*a*) Reading of pictures
(*b*) Relating of stories from history lessons etc
(*c*) Production of the substance of what has been read or of the poetry learnt
(*d*) Chatting with scholars about the school and its contents the life of the children etc
(*e*) Writing answers to questions bearing on the work done

Each written composition should have a distinct aim the cultivation of the imagination the training in the making of a clear and full statement of a fact or a series of facts the clear setting forth of arguments for or against something or other and the like In the reading singing and recitation lessons pronunciation correct breathing distinct utterance etc will receive careful attention

Poetry —In this branch of study everything will be subordinated to the desire and aim of inculcating a love of poetry in the scholars For this purpose a number of poems will be read to the boys and by the boys some of them being learnt by heart No poem will however be repeated *ad nauseam* for the mere purpose of ensuring its exact production by each member of the class The poem will be read and discussed before being learnt an attempt being made to get the boys to realise the circumstances of the poem and to enter as fully as possible into the meaning of it some interesting facts should be given about the author and other poems by him should be read and referred to The boys should be led to see the felicity of the language used and the beauty of the thought expressed in the poem Rhyme and rhythm inversion and other devices in composition the import of the figures (similes and the like) introduced should be dealt with according to the age and class of the scholars The connection between music and verse should also be dwelt on It is intended that the best poems of this and other years should be revised at times so that the boys may acquire a repertory of good poetry of their own No simultaneous repetition of poems will be permitted

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PHILANDER SMITH COLLEGE—SUMMARY OF TEACHERS NOTES

Physical Geography

Stds V VII

1 Shape of earth its motions inclination of axis to plane or orbit seasons zones
2 Evaporation and condensation (taught by simple experiment) rainfall
3 Winds rainfall treated more fully
4 Denudation and erosion vegetation belts of the world
5 Ocean currents Their effect on climate (see simple experiment — Comparative Geography p 18)

General method of studying a country (based on Physical Geography lessons already given)

1 Position on globe or map of world Have size calculated from lines of latitude and longitude (tell number of miles between two successive degrees of longitude measured along a given parallel of latitude *e g* a degree of longitude 45 miles at 50 N Lat)

2 Use model to show physical features generally, mountains, river basins, plains, table lands general slope of country etc , give names of principal physical features Test with blank map or model Have entered on pupil s sketch maps

3 From situation of country and nature of surface educe temperature and rainfall From position of mountains and amount of rainfall educe nature of rivers, narrow and rapid or broad and slow flowing, whether navigable or otherwise, etc , show map containing a few isotherms (in addition to mountains and rivers) Show by its side another map with winds and rainfall marked Have copied by pupils

4 Educe natural and, wherever possible, industrial, vegetation, from latitude, climate etc Enter on map and show along with rainfall and temperature maps

5 Trace occupations of people and growth of towns from 4 Give chief towns and political divisions Have entered on sketch maps Test with blank maps

6 As far as possible, educe trade routes from productions map

7 Elicit general characteristics of people from nature of country Tell any interesting facts as regards dress, customs, etc

General Notes

1 Pupils should be trained to draw rough memory maps with as few guide lines as possible, rather than copy finished maps with the aid of squares

2 Compare and contrast whenever possible with other countries already studied

3 Correlate with history as far as possible

GEOGRAPHY

In the lowest class nothing like formal geography will be attempted, nor will definitions be committed to memory The aim will be to give the children a liking for the subject and a desire to know more about it Stories of children of other lands will form a good part of the work done Lessons on the hills and the like will be based on the outdoor observations of the children themselves

In class IV and upwards, the main aim will be to bring out the connection between the surface position, etc , of a country and its productions, and the occupation and character of the inhabitants together with the bearing they have had on the history of the people Much use will be made of comparative geography, frequent reference to and comparison with the geographical facts of the immediate neighbourhood being made The children will be taught how to use an atlas so as to trace the connection between physical and climatic conditions and the life of the people Relief maps made of Plasticene will be constructed and pictures and other illustrations shown of the places and scenes spoken of in the lessons Diagrams will also be made shewing the comparative heights of mountains, length of rivers, and the like

In dealing with a country, maps will be drawn illustrating by color such points as the following —

(*a*) Relief, (*b*) Temperature, (*c*) Rainfall, (*d*) Flock and sheep rearing, (*e*) Railways, (*f*) Population, etc

The lantern will be made use of where possible for increasing the interest in the subject

Classes I and II

Methods as in previous standards particularly as in standard V

1 Asia—general—India and the Straits Settlements, Japan and China in more detail

2 Australia

3 Africa—general—Egypt and South Africa in more detail

4 America—general—Canada and the United States in more detail General diagrams and maps shewing distribution of world's products, races, etc

Class III

(See method of taking England etc)

British Isles must not be forgotten but must be frequently referred to in illustration of and in contact with facts about other parts of Europe

Study of the Map of Europe

Position on map of world and on globe its outline compared with that of the continents and deductions therefrom

Leading physical features —The direction and character of its high lands and so direction of its rivers mountains and rivers of Spain and France the Alps the Pyrenees etc effects of physical features on climate and on the character, occupations and the history of the people Productions of the various parts Political divisions (with physical divisions) with some idea as to how these have been determined by the geography of the country Leading towns with reasons for their existence and importance *e g* Vienna Constantinople Venice and Genoa compared

The regions of rarest and densest population considered in relation to their position natural seasons and industrial activities

Principal countries to be studied in more detail Correlate with History See previous remarks

Europe illustrates better than any other part of the world the dependence of History on Geography

General — The world generally trade routes chief countries trading with us and chief commodities of trade chief races of the world and distribution of population agricultural manufacturing and commercial countries with reasons

Class IV

The British Isles—maps to be studied especially photo relief and relief maps Effect of insular position of British Isles and their position with regard to—

(*a*) The world generally

(*b*) The Continent of Europe with its dense populations

(*c*) Japan and New Zealand

Advantages of position from strategic and commercial points of view Hence a Great Naval Power Productions occupations and distributions of the people to be deduced largely from a study of the maps

Means of communications and transport

Care must be taken to make the work a continuation and extension of previous work Comparison with and reference to England and Wales should frequently be made as regards productions peoples and their origin etc

Analysis of the positions of large towns and reasons for the decay of some and the growth of others Correlate with History maps to be used in History lessons Influence of Geography on History of the British People *e g* the clan system of Scotland—directions of invasions from Scotland to England and consequent positions of battle fields

General —Map of the world—main divisions and countries chief causes which influence climate and production Insular and continental climates Longitude and latitude

Class V

England and Wales

Position and size (relative)—map of world globe and map of Europe to be used

Simple inferences as to seafaring character of the people commercial importance climate etc, to be made

Surface —Relief maps sand tray illustrations colored and any other aids to realisation Constant reference to the district and outdoor lessons to be taken when necessary

Position of high lands, slope of land, watersheds, rivers (their directions how determined) character, navigable or otherwise and why

Effect of surface and climate on productions and employments of people

The industries of Halifax District and reasons for them found, leading up to a study of the chief industries of the country and the reasons for their placing main lines of railway and ideas of distance from measurement on maps and from railway fare

General—Map of the world and the globe to be studied Chief divisions and countries especially those trading largely with England, with rough ideas of distance and our imports from them

Descriptive accounts of the people of these countries should be given, and pictures shown when possible

Correlation with History—Map to be used in History lessons Sketch maps to be made of old divisions, Roman roads etc

Class VI

1 The desire here is to give the children a first hand knowledge of the district and of the various features it possesses In this way very much may be taught as regards hills, valleys, slopes, watersheds, rivers, canals, railways, occupation of the people and the like that will serve as the foundation for the work of upper classes

2 Plan of school block

Plan or map of part studied in outdoor lessons, extending to map of Halifax and District of West Riding and later on of Yorkshire itself

Relief maps of the parts visited will be made by the teacher and afterwards by the children by use of plasticine or sand tray

3 Simple charts of observation of the winds, temperature, length of shadow caused by the sun, etc, will be made

4 Stories of children of other lands

Class VII

Geographical terms, *e g*, hill, river, valley to be taken as far as possible by means of outdoor lessons and afterwards by use of sand tray and plasticine

Points of the compass by observing the sun's varying position, direction learnt by reference to journeys made by child to school, etc

Globe to be shown and descriptive lessons of children of other lands given

Lessons on pictures and views of places of interest, especially places in our own country

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HALF SHOW BOYS' COUNCIL SCHOOL, HALIFAX, ENGLAND

Copy of Scheme in History

In the lowest classes, stories (fabulous or otherwise) will be related to the children by the teachers who will make the teaching as impressive as possible, by the use of drawings and illustrations and also by allowing the children at times to represent a simple dramatic representation of suitable scenes and actions The chief object will be to interest the children, and to draw simple lessons of courage, endurance, generosity, and the like from the stories

In the upper classes, the teaching may be chiefly by means of the lives of prominent men and women who stand as representatives of the times in which they lived Pictures and illustrations must be used, here also mere verbal expression being entirely unsatisfactory A lesson may very often centre round a picture or drawing and leave a very vivid impression by association

The connection between the history and geography of a country must be constantly kept in view, and the influence of the geography of district in shaping the destiny of its people must be brought out clearly The teacher must spare no

effort to make the subject *live* Realisation of the circumstances and conditions dealt with is of far greater importance than the memorizing of facts

Poems on important events in History should be read and discussed and songs where possible should be taken which illustrate or commemorate the events dealt with The teacher should always be on the alert to associate and connect this and other subjects (drawing composition and the like) and to prevent its being left in a state of isolation

A time chart should be constructed in the upper part of the school and an attempt made to locate important events

History

Classes I and II

(1) Races of Britain
(2) Early Englishmen and their first home
(3) Alfred and the Danes
(4) England under foreign rule (Danes and Normans)
(5) Feudalism its worst evils
(6) English Kings abroad Henry II and Richard I
(7) Magna Charta
(8) The three Edwards Scottish Independence

Class III

A brief outline of the History of Europe with special reference to the relation of Britian with the Continent

Readings from prose writers

Poetry to be read and discussed

HALIFAX

BRITTON ROAD COUNCIL SCHOOL

1 Organization

2 Ideals and Aims

1 The infant school is staffed for an average attendance of 240 with one Head and five Assistant teachers The Junior department with the same average has the same staff while the Senior school with 320 average has one Head and seven Assistants There is a Principal responsible to the Education Committee for the smooth and efficient working of the school Of the 21 adult teachers thus employed six are men and fifteen women and all save one certificated

As in all other Halifax Council Elementary Schools each teacher is allowed forty pupils in average attendance and as nearly as possible this regulation is conformed with Some three or four student teachers each year are taught something of the practical work of their profession Each spends a term in each department under the special personal direction of the Principal There are 60 children working half days at mills or employed at home and partially exempted These are all in one class known as the P E (partial exemption) class with an average attendance of 30 If at the age of ten a child is not able to take up the work of the senior department he (she) is put into a small C O (Contracted out) class (average under 20 children) where individual attention is easier and this individualising results frequently in an abnormally backward child gaining confidence and acquiring sufficient grasp of mind to join his (her) normal companions Two years work in this small class produces at times wonderful results If left with an ordinary class these children attract more than their fair share of the teacher s time are calculated to disturb their teacher s patience and retard the progress of the brighter children These two exceptional classes are outside the ordinary organization They have special time tables and special curricula

On leaving the Infant department at seven, a child has twelve classes to pass through in the six years remaining of his school life Reorganization and promotion take place twice a year, Christmas and midsummer, allowing a normal child one term in one class, of course many children are able to miss a class, and so reach the first class at 11 or 12 and supply candidates for County Council scholarships or help to keep the highest class well fitted At all times great care is taken that their progress should be natural and not forced On the other hand, a few from sickness and other cause fall behind, and have to take one term s course twice over but these are not numerous

Generally one teacher has the same children through their career in a particular department and not unfrequently a mistress will begin with a set of children as babies and teach them till they reach the senior department (from their being three to ten years old)

The underlying principle is that the child itself is of more importance than the subject taught, or the stage of its own development In this way intimate continuous and sympathetically human relationships between children and teachers are set up that have deep reaching moral and educational influences The professional advantage of being able thus to observe the growth of child s mental and moral forces for continued and interesting periods cannot be overestimated, neither should the fact be lost sight of, that the constantly varying programme keeps the teacher's wits alive and helps to cultivate an inquisitive and acquisitive mind

Educational value

The Halifax Education Committee places a very high estimation on physical training and development, and so all the time permitted by the Board of Education during school hours is utilised to the full and a good deal of time is given by the teachers to cricket, football, and hockey outside those hours The school premises are well ventilated and well placed Two large recreation halls provide room for "Physical Exercises" as defined by the Board, for dancing and for games and make free play a reality

Skipping specially during the morning and afternoon vacation, is made much of by the Staff, and there are but few of the 600 children over seven who have not ropes of their own There is a "Skipping Carnival" (races, etc) in the boys play ground at the end of July and it is popular A School Doctor has been employed by the local authority for the past dozen years

A good deal of time is given to Handicrafts Beginning with the Infants department, Carten work is continued throughout the Junior and Senior Schools, the boys receiving instruction while the girls are at needlework, clay modelling is taken by all children in Infant division, but is confined to boys only in the senior

Cookery is taught to girls of eleven and upwards and woodwork to boys These two subjects are under special teachers

Ideals and aims

It might not be out of place to add that a great effort is made to secure the happiness of children, to cultivate a real love for each other and for school Is not the ability to, and desire for, love developed as are all other faculties? Is not 'Learning by doing' the rule in the highest as in the ordinary sphere of "Pedagogical activities' — "First and best of Earthly Joys? He loves the little girls and boys Which of all does he love best? Why, the one that is happiest' This desire to have school associated with good things, good times, and good people, means *individual liberty*, liberty to ask questions freely, to criticise fearlessly, and vocal self expression is spontaneous As far as is consistent with school discipline, fear is banished, and restraint except cultivated self restraint is absent

In a score of different ways this self command is cultivated No children speak in their teacher's temporary absence An upper class can be left to do its given work for half a day Boys or girls who can swim and have self control are free of the bath at certain times The boy captain gets his class in and out of school orderly and expeditiously under the care of certain steady children—Monitors wearing the school badge who are free of the premises The "morning's" moral

lesson frequently derives its force and insistence from the illustrations the school's ordinary work affords

There is a good school library supplied by the local authority Books are selected by a committee consisting mainly of teachers

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ASTON COTE ELEMENTARY SCHOOL

May 1910

Scheme of Rural Education

The purpose of Education is to lead the child into the fullest truest and most fruitful relations with the world in which he lives

Boys

Land cultivation is the future employment of the average boys of the country district therefore gardening has been chosen as the core of this scheme

History

History—Short History Ordinary Syllabus—Supplementary History of the Country

English

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Geography

The various parts of the earth will be studied as follows —

(1) Position with regard to land and sea
(2) Latitude prevailing winds
(3) Climate rainfall rivers soils productions vegetable mineral and animal Industries of towns Commerce—Exports and Imports

An attempt will be made by dividing the countries into Natural Regions to show clearly the influence of physical features on the life of mankind vegetable etc

In the consideration of climate attention will be made to maximum and minimum temperature of places as well as the average temperature Stress will also be laid on the importance of studying seasonal distribution of rain as well as annual rainfall in order to understand the effect of climate on vegetation The Geography of the country will receive special attention

Rural Science

The plant as a whole Flowers and fertilisation How seeds are scattered The structure germination and growth of seeds

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THE COUNCIL SCHOOL HALIFAX

Practical Gardening

1 The various tools used in gardening operations spade fork common hoe dutch hoe rake trowel and garden fork —Their use and misuse

2 Plotting out the land plan of beds arrangement rotation of crops

3 The soil Natural forces by which it was produced Their operation Various ingredients of soil their importance and combination Their value in a pure state simply as sand clay chalk detection of ingredients

4 Garden operations digging trenching ridging—use and characteristics Digging *versus* ploughing

5 Lime and manure uses of lime manure making a manure heap utilising vegetable refuse compressed farm yard manure

6 Preparation of seed beds Transplanting, Causes of failure

7 Garden vegetable crops Potatoes, beans, peas, carrots, radish, turnips, cabbage, cauliflowers, sprouts, marrows

8 Preparation of hot bed and production of cucumbers

RECORD OF NATURE STUDY OBSERVATIONS

Date—nature of observation—place—reasons—and inferences

Rural Science

Nature study of the child —Nature study Examination of various forms of roots The structure and use of leaves

Relation of plant to air, water, and soil, examination of plants with special reference to leguminous, composite plants, and the position they occupy in farm and garden crops Collection of weeds, Means of extermination Examination and observation of growth of annuals, biennials, perennials

Simple chemistry of air and water Brief consideration of elements and compounds important in agriculture Ingredients which are used by peasants

Classification of manures, phosphates, nitrogenous, potash, mixing of manure, study of chart in practical school gardening Rain water and what it adds to the land Detection of substances in water Use of thermometer in taking temperature of air, water, milk and soils Different kinds Differences in proportion to clay, sands, porosity and capillary power Variation in temperature Difference between surface and subsoil, common birds, friends or foes of the farmer

Gardening

Preparation of the land Manures and manuring soils Arrangement of plots to make most of ground Proper use of gardening implements Seeds of germination Seedlings and their treatment

Practical Gardening

"Rural Science

Vegetables, their use and general treatment, cultivation, management of root crop, green crop, intermediate crop, potatoes, diseases and pests affecting vegetables Fruit crops, Bask fruits, large fruit, young fruits, peas, root pruning

Flower garden —Seasonable operations, selection and raising of suitable plants

FREE HAND DRAWING

AND

BRUSH WORK

To follow lesson on Rural Science

The lesson will be used to illustrate the science lesson to impress on the memory by means of drawings and paintings the information gained by observation

ARITHMETIC

First four Rules

Problems which relate to agricultural commodities, average value, profit and loss, invoices, systematic methods of recording income and expenditure Simple interest Rate and times ratio Area, volume, simple book keeping

WOOD WORKS

The aim of the lessons is to give the lads an acquaintance with the elements of construction of common wooden objects of the field or garden The models will be arranged in a progressive order of difficulty, so as to give practice by the use of tools

Dimensioned working Drawings of each model or object will be drawn by each boy before manual exercise Acquaintance with varieties of wood in common use Measurement of wood Repairing—preservation of wood by paint and tar

The following is a list of some of the models —

Dibbler seed box potato box rake milking stool hencoop bee hive garden gate ladder, door

Mechanical Drawing

and

Object Drawing

This lesson will be closely connected with mensuration part of arithmetic lesson and the gardening lesson and wood work lesson

Scale Drawing—Plans of school room and measure field school garden Diagramatic representations of grafting hedge ditch cutting etc

Object Drawing—Doors windows partition gates garden implements etc Memory drawing of common objects and tools as Dutch barn milkstone fruit press etc

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SCHEME OF RURAL EDUCATION—GIRLS

Household Arithmetic

(1) First four rules (2) Fractions vulgar and decimal (3) Cost of common articles of food clothing furniture (4) Simple calculations worked mentally (5) How to send money through post (6) Apportionment of small incomes for food clothing rent etc (7) Receipt and payments in cash and cash payments rather than credit (8) Savings bank (9) Profit and loss

Cookery

Nil

Laundry

Materials used in washing soap soda starch and washing different clothings

Household Management

Furnishing the houses walls and doors carvings care and cleaning of the house daily weekly and spring

Food—Composition

Clothing—Choice of material and cost of comparative value of flannel

Personal hygiene

Illness

Care of infants

Correct clothing and suitable foods

Freehand Drawing and Brush work

(*See syllabus for boys schools*) To follow lesson on rural science The lesson will be used to illustrate the science lesson to impress on the memory by means of drawings and paintings the information gained by experience

Mechanical Drawing

Drawing of patterns of garments to be cut out and made up in needle work lessons

Bee and Poultry keeping

How to commence bee keeping Wintering general management of apiary arrangement of apiary hives and their cleanings introducing queens transference of bees from skep to hem etc diseases of poultry

English

Conversation and composition — Matters of domestic and rural interests
Ex Co operation—marketing, etc
Oral and written composition
Reading of books, health readers and writing

Needle work

1 Different methods of joining materials
2 Sewing on tapes
3 Mending
4 Quantities and prices of materials used in making undergarments
5 Drafting patterns
6 Knitting of socks
7 Practice in use of sewing machine

Rural Science

Observation of life history of bees brood taking, etc , swarming, artificial swarming, honey and honey extracting, wax extracting, feeders and feeding, general anatomy of bird, giving short description of alimentary canal

Chief breeds of poultry, care of eggs, chicken rearing and treatment The plant as a whole Flowers and fertilisation How seeds are scattered The structure, germination and growth of seeds The structure and use of leaves

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URDU SHORTHAND

This system of shorthand has been prepared by the Department of Commercial Education, Reid Christian College, Lucknow, under a commission from the Government of the United Provinces

During the past three years three classes of officials have been deputed by the Government to be trained as "Urdu Shorthand Reporters" The first class has successfully completed the course and has demonstrated the practical value of the system, a speed of 150 words a minute having been attained in the course of eighteen months

M SRINIVASA RAO

No 538 *Dated 10th February 1911*

From

The Head Master Government Normal School
Mysore

To

The Inspector General of Education in Mysore
Bangalore

Sir,

With reference to your No 5680 84—894 of the 22nd December last I have the honour to submit the following report on my visit to the United Provinces Exhibition

The exhibits in the Education Court to which I confined my attention are of two kinds—Indian and English The former are chiefly drawn from Northern and Western India the latter which have been received mostly through the Board of Education London are in their general features similar to those displayed at Mysore in 1908 Specimens of Indian and English work are shown side by side in each section This arrangement facilitates comparison and even a cursory inspection is sufficient to show that considerable progress has been made by Indian schools in carrying on work according to what may be described as reformed methods There are brief written notes explaining many important English exhibits striking examples of these being the schemes of work sent by the Haugh Shaw Boys Council School Halifax Such explanatory notes are of much value to the visitor for they lead him to see at once the whole significance of the work exhibited Except in a few cases the Indian exhibits on view do not afford any guidance of this kind

I Primary Education

1 *Nature Teaching* —The English exhibits here relate to the study of plants and to observations of weather As may be expected systematic studies of natural objects are few in number for the continuous attention which such studies demand is too much for children of this stage The majority of the exhibits are in the form of calendars and illustrate how the powers of observation and expression are exercised in early stages As an instance may be mentioned the weather calendar from the Park Street Infant School indicating in drawings of coloured chalk the conspicuous features of all the months of the year Thus April shows two school children walking under an umbrella As another instance may be mentioned the nature calendar received from the Princess Road School Manchester showing the characteristic flowers of the several months Thus under May are drawn the lily of the valley daisies and the tulip indicating that the children whose average age is only 6 years note the plants and learn their names The children themselves collect specimens and the sketches are made after a short conversation with the teacher Among Indian exhibits the most noticeable are the object lesson sheets prepared in the vernacular by students of Normal Schools all illustrated with fine brush drawings

2 *Hand work* —There are a great number of both Indian and English exhibits under this head They consist of drawings clay models paper work card board work wood work wicker work etc Much of this has been done in connection with nature teaching which affords the widest scope for training the pupil's hand and eye Also there are several exhibits—such as paper cutting and pasting correlated to the well known fable of The Fox and the Grape —which show how manual work can be made subsidiary to other lessons

3 *Geography* —The work of Indian schools here is practically confined to coloured maps of various provinces globes locally made and raised or relief maps While these indicate that the learning of Geography without the aid of a map has become a thing of the past there is nothing here to point out that the content of

the Geography lesson is now really very much different from what it used to be and that other powers than mere memory are exercised through that lesson Among English exhibits however, there are, in addition to the usual maps, a number of samples showing in what various ways the Geography lesson is made profitable to pupils As one instance of this diversity of method may be mentioned the "School Geography Walk,' an illustrated description of which, has been received from the Southwood Primary Schools Before this walk is undertaken, preparatory lessons are given on the geological structure and formation of the ground to be traversed and a geological model map is then made showing the various strata After the walk, each boy writes an account of it and also arranges, names, and labels the specimens of rocks and sands he has collected Another interesting variation on the ordinary lesson is the study of the map combined with the physical geography of the neighbourhood, details of which have been received from another school The contour lines are first traced from the survey maps of the district and are reproduced by means of a duplicating apparatus These are distributed among the pupils and, after a few minutes study, the class is asked to write descriptions of the country shown on the map The idea of contour lines is still further emphasised by the construction of one or two relief models by pasting stiff paper, each layer of which is to represent a certain altitude These models are then tinted appropriately to "show up' still more Equally interesting are specimens of practical work, done by younger children, such as wind charts and graphical representations of the shadow as measured at noon on various days

4 *Mathematics*—Arithmetic in English schools is not confined to mere exercises in numbers but is combined with space work and measurement drawing, so that it becomes easy to make use of graphical representation even in the primary stage The practical turn given to the teaching of Arithmetic is illustrated by the various curves of attendance, temperature, etc, as also by rough plans and front elevations of simple objects like a cupboard Arithmetic, like Geography, is thus handled in a thoroughly practical manner and associated with facts within the experience of the child

5 *Physical Exercise*—This subject receives but scanty attention in Primary Schools of this country In some of them aspiring to do "Kindergarten teaching,' games are included, but generally speaking, nothing, beyond a little practice in drill, is given In English schools, on the other hand, the forms of physical training include musical drill, organised games, dancing and free play, and latterly, exercises in deep breathing which are considered to be of great value have also been introduced by Government

II Secondary Education

1 *Nature Study and Gardening*—The exhibits under this head are of the usual type consisting of Nature note books, systematic studies of plants and animals and preserved specimens of natural objects In addition to these, among the English exhibits, are a few relating to school gardening which is more practical and at the same time more comprehensive than Nature Study The place of gardening in a Primary School is, to some extent, recognised in this country but its place in secondary education does not appear to have yet received much attention While the school garden provides boys with a wholesome kind of hand work, it, at the same time, helps to cultivate the most necessary mental and moral qualities No school, whether primary or secondary, can afford to be without this great educational aid But the purpose which this subject serves in a Secondary School is somewhat different from that it serves in a Primary School The following statement received from the Haugh Shaw Boys Council School, Halifax, helps in determining its function in secondary education

"Object of garden—

(1) To get an idea of seed sowing and the different methods of vegetable and fruit culture

(2) To obtain a knowledge of—

(*a*) how soils are formed,

(*b*) the various substances which characterise a good or a poor soil,

and (*c*) the names of the plants that are grown

(3) To provide material for the Nature Study lessons which are given in the school

(4) The cultivation of the power of observation by noting the developments of the various plants

At present in many of the Lower Secondary Schools in this Province agriculture is taught and if its teaching can be connected with school gardening students will be very much profited The mere reading of a text book in the case of subjects like agriculture seems to be of little value

2 *Manual Instruction*—Under this head come a great variety of exhibits from simple drawings to fine work in wood and metal Some of the Mysore sloyd work is exhibited here The Higher Grade Training College Allahabad has sent an instructive scheme of sloyd work It is an adaptation from foreign schemes and includes only such models as are familiar to the Indian student The set of models consists of the following—(1) Oblong prism (2) Tent peg (3) Plant label (4) String winder (5) Flat measurer (6) Round ruler (7) Boot rack (8) Pan stand (9) Flower Pot stand (10) Small box without lid (11) Bracket (12) Dovetailed box (13) Bracelet (more complex than 11) (14) Simple frame (15) Pen tray Among other wooden models exhibited are some which correspond to design work There appears to be some difference of opinion as regards the advisability of including such work in a course of sloyd but from the specimen on view at this Exhibition it seemed that educationally a great advantage would be gained by its inclusion It is eminently suited to develop the student s practical and inventive powers simultaneously

3 *Drawing*—Though falling under Hand work this occupation deserves to be mentioned separately owing to the great multitude of exhibits relating to it The best Indian exhibits under this head do not seem to be inferior to the best English work Many High Schools such as those at Agra Lucknow have sent excellent drawings and some of these schools possess a graded course of work This is the form of Hand work which is put to a miscellaneous use and in teaching it all varieties of materials from coloured chalk suited to the youngest of children to the flexible brush have been used The diversity of form in which drawing may be utilised is an index of its suitability for all grades of education In a few schools in this Province where drawing is now taught it is considered as an *end a subject* but on account of the varied discipline which it may be made the means of yielding to the pupil it deserves to be recognised as an *integral part* of the general school course

4 *Religious and Moral Teaching*—This subject does not admit of being exhibited but one of the English schools has sent an instructive statement of the aspects which it may have in schools It is as follows —

(1) Personal example and influence Setting the tone of the school Reverence and duty

(2) Practical social life and duties Responsibility towards home and school Training in good work and comradeship

(3) The building up of ideals from History and Literature

(4) The training of wonder and admiration of enquiry and effort through nature and art

(5) Bible lessons together with the psalms and hymns at school opening

III Training Schools

Some of the work of these schools has already been noticed Besides this there are on view several Nature Study books and model notes of lessons prepared by teachers in training The most important exhibit in this section is a scheme for the special training of teachers in what is called rural science prepared by the Essex Education Committee The need for this special training is explained thus

The importance of nature study is recognised but too often the instruction is of a useless character because the teacher has paid attention to only one science or knows no science at all The course contemplated is comparatively a short one and comprises chemistry of plant and animal life horticulture geology and

zoology and includes outdoor work as well The above remark about the general incapacity of lower grade teachers to conduct Nature Study lessons applies with even greater force to Indian teachers and the need for giving them special instruction in science is accordingly greater Occasionally special normal courses are arranged for, in this Province, but hitherto no provision has been made for including science in them Seeing how ill equipped vernacular teachers are in the matter of science, it appears desirable to make future special normal courses more comprehensive by including instruction in nature knowledge and appointing a specialist in natural science to impart it Further it appears necessary to alter the syllabus according to which science is at present taught in the Mysore Normal School, and make it more suited to teachers, the majority of whom have to work in country schools Now it is a purely theoretical course that is prescribed, it needs to be at least partly practical and experimental

IV Miscellaneous

The other exhibits relate to Arts and Professional Colleges or to special schools such as those for defectives The exhibits under colleges are confined to plans of the proposed buildings of the Allahabad University, photographs of English and Indian Colleges, calendars and hand books for the guidance of students A few noteworthy appliances for teaching science, made at the Physical Laboratory of the Muir Central College, Allahabad, are also exhibited The specimens of work from special schools are more or less similar to those noticed under Primary and Secondary Education

Before concluding this report, I have to refer to a scheme of Rural Education (*vide* Appendix) sent by the Manchester Education Committee The most important feature of this scheme is that it admirably maintains the balance between what are known as the *general* and *practical* aims of education It is the framing of curricula, on this model, that is urgently needed for our schools In the extreme lower stage, it is, no doubt, necessary to keep to the purely *educational* aim, but in determining a plan of instruction for the upper primary or higher elementary stages, both the general and practical aims have to be kept in view The future occupation of the majority of boys attending our village schools being cultivation of land, the instruction given in them needs to be agricultural in tone This requires a curriculum which centres round gardening In the case of boys dwelling in places where some industry prevails, a similarly practical curriculum but a somewhat different one, may be necessary and a *predominantly general* education is advisable only for boys who, after the elementary stage, do not enter life at once, but proceed to a further course of school training A differentiation of the curriculum, in some such manner, appears to be necessary, if the interests of education in the early stages are to be fully secured

I have the honour to be,
Sir,
Your most obedient servant,
M HIRIYANNA,
Head Master

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FROM

MR. M BAVASAHIB MIYAN

Superintendent Government Industrial School

Channapatna

To

J WEIR ESQ M A

Inspector General of Education in Mysore

Bangalore

SIR

With reference to your docket No 5680 84—376 dated the 22nd December 1910 I have the honour to report that I left Channapatna on the 25th December 1910 and reached Allahabad on the 29th

As the Exhibition was too comprehensive to be studied within the short period allotted to me I arranged my time in the following manner from the 30th December —

Work Stalls at the entrance where the processes of 110 Industries were demonstrated	10 30 A M to 2 P M
Work Stalls and Demonstration Halls in the Forest and Agricultural Courts	3 P M to 6 30 P M
Industrial Education and other Courts	7 30 P M to 10 P M

Thus I worked in the Exhibition from 10 30 A M to 10 P M taking my meals in the Exhibition Hotel itself

Industrial Education —The Education Court contained important exhibits on industrial and art education and there were also many instructive exhibits from Commercial Schools and Colleges Schools for defective children and reformatories

The most important exhibits in this court were the Syllabuses Time tables and Models of sets of lessons in joinery wood carving basket making pottery turnery metal work etc which are adopted in typical British Industrial Schools

The present method generally employed in the Industrial Schools of the Province is based on apprentice system where boys are set to work under a Maistry and are given no regular course of instruction by prescribing sets of models the preparation of which should involve all the processes and principles of an industry Now the boys simply learn by observation and absorption Many no doubt absorb knowledge and learn to use tools well in a short time but even such pupils are not able to understand their work thoroughly To produce competent men a regular graded course is therefore a great necessity

So I wish to adopt this system in the school with slight variations to suit local conditions and requirements because the models to be prescribed should be articles of daily use

Lacquer works —There were some specialities in lacquer works which attracted my attention and I learnt the processes from the experts employed in the grounds

The following is a brief description of the novel features of the art —

The speciality of Bijnur Lacquer works consists in—

(i) adorning lacquer ware with beautiful designs either in silver foil or an amalgam of mercury and tin

(ii) in applying lac to wood in such a way as to make the surface appear like marble paper of various designs

These kinds of works were unknown in these parts and I had not seen or heard of them either The processes are easy and they make the articles very attractive and also enhance their value

I am glad to state here that I have already introduced them into the Industrial School and the specimens of work done here are herewith submitted

Another peculiarity of Bijnur Lacquer works is that the coat of lac given to a piece of wood is evenly spread over the surface with a piece of the stem of the date palm leaf I have tried in the school the same thing with a piece of the stem of Echal leaf and the same result follows

The Bijnur expert had an improved kind of hand lathe, a sketch of which I have brought here He had also a very fine labour saving drill for boring wood I wish to introduce these appliances and contrivances into the school, and all these will not cost more than Rs 5 a set

It is a pity that lacquer experts from other towns did not come to the Exhibition to demonstrate their work, hence I could not learn the processes involved in their manufacture There were lacquered ware exhibited from other centres of this industry and the following were the important varieties among them —

Abri and Atashi lacquer ware from Hoshiarpur were exceedingly fine regarding the variety of design, the depth of colour, and the purity of polish There were also exhibits of Nakshi Lacquer ware of which kind there were two varieties,

(i) Oiled and scraped

(ii) Etched Nakshi Lacquer exhibits

On black back ground yellow stems and leaf stalks, green leaves and red flowers with yellow or party coloured veins and shadings were elaborated

Pakpatan produces floral designs which manifest a softening and blending of colours that bespeak great skill and delicacy of touch Ferozepur produces fern like ornamentations which assume geometric arrangement of spaces In Dera Ismailkhan Ivory buttons and discs are given as centres for an elaborate and minute floral pattern In Sahiwal a bold open style of this art is practised in which only two colours as a rule are employed black as a ground colour and the second colour is red, yellow or green In Jaipur and Indergarh hunting scenes are cleverly etched with natural shading of colour

Silk —Regarding the silk industry there were important exhibits from Pusa There were two simple machines for silk spinning and silk twisting designed by the Imperial Entomologist Research Institute, Pusa, and prepared by Messrs Arthur Butler & Co, Muzaffurpur The Machines, though simple, are highly labour saving and wonderfully cheap as both of them cost within one hundred rupees With an idea of introducing these things in Channapatna, I have learnt the working at these machines

Silk waste —In addition to this, I have learnt from the expert who was in charge of this section the method of refining silk waste The Province has now been exporting every week silk waste worth thousands of rupees at the rate of about Rs 15 a maund and the price of silk is about Rs 160 a maund The method of converting this waste into silk is thus very important The process is marvellously cheap and easy and the yield is a little more than 40 per cent

I have submitted herewith specimens of raw silk waste and the purified stuff I prepared in the school The processes do not require any chemicals to be purchased from outside Channapatna

Silk industry is of great importance to the Province in general and Channapatna in particular If a silk section is started in the school at the initial expenditure of Rs 500 and a recurring expenditure of Rs 480 per annum, I am quite confident that I will be able to improve the silk industry on the most practical lines advocated by the Research Institute, Pusa Since this is a paying industry, numbers of raiyats are engaged in it and I hope the Government will be able to realise an appreciable portion of the establishment charges in spite of the institution being of an educative character

Pottery —The vases exhibited by the Bombay School of Arts are well worth imitation on account of the 'brilliancy and variety in colour, quality of glaze and technical finish," and so I have minutely studied them and brought their sketches

I have also seen the processes of making Nizamabad pottery These are exceedingly fine The speciality of this pottery consists in (1) giving such beautiful shape as in high class glass ware, (2) in smoothing the surface, (3) in giving black and reddish brown colour, (4) in adorning the surfaces after baking with an amalgam of mercury and tin which is rubbed with the thumb into lines etched with a sharp instrument on the unbaked ware

I shall introduce these specialities into Bevur and Nagawai if I am kindly permitted to go there and stay in each of these places for about a fortnight for the purpose Bevur and Nagawar are within 10 miles from Channapatna and the clay of these villages is exceedingly fine and well suited for such high class pottery and the potters of these places appear to be intelligent

Brass work —I have also noted the various processes in the manufacture of the famous brass vessels of Moradabad The article is cast and polished on a lathe Then it is tinned in the usual way It is next deeply engraved Once more it is placed on the fire This has the effect of dulling the tinning temporarily but making it more durable While still hot sticks of coloured shellac are rubbed over the portions of the surface that are intended to receive the colour The vessel is then allowed to cool and is once more mounted on the lathe and polished so as to remove the excess of lac on the raised parts

If provision be kindly made to fit up a brass smith class in the school at the initial expenditure of Rs 100 I shall introduce the Muradabad method into the industry

One of the brass smiths of Magadi may be employed in the school as Maistry on Rs 20 per mensem

Wood pulp —In the Forest section there was a Laboratory fitted up to investigate the pulp making properties of timbers grasses and other forest products which are at present of no commercial value For this purpose the services of Mr W Raitt the famous wood pulp expert have been secured by the Exhibition authorities for three months on Rs 1 000 per mensem The plant employed is of a special design which gives practical commercial results

The investigations have been so far quite successful r garding the following species of timber etc

1 Pinus Longifolia	4 Populus Ciliata
2 Bamboo	5 Gruwia Species
3 Bombax Malabaricum	6 Eydia Calycina

The names are arranged in the list in point of their qualities from the pulp making point of view

Thus it is quite obvious that bamboo yields wood pulp which is second only to Pinus Longifolia Our forests contain an inexhaustible supply of bamboos and other fibrous timbers and grasses etc which are of no commercial value The country contains large quantities of limestones and Fuller s earth (which has crude form of Sodium Carbonate) There is also the advantage of Electric power If the wood pulp factory is located at Nanjangud there will be railway connection and plentiful supply of water Thus our Province is eminently suited to this industry

Mr Raitt has promised that if the Government of Mysore wish to secure his services to investigate the pulp making properties of bamboos and other waste products of the State he will arrange to get a loan of apparatus of the special plant for the purpose from the Government of the United Provinces of Agra and Oudh Mr Raitt is of opinion that a wood pulp factory can be started with a capital of about 3 lakhs of rupees and that it would be a highly paying concern

I have herewith submitted samples of wood pulp prepared in the Exhibition out of different timbers mentioned above

Papier mache work —The papier mache work or Kutti ka kam was demonstrated in Jaunpur work stall by Mr Hafiz Abdul Rahman The work consists of fine artistic paintings on cardboard and wooden articles of furniture If a good painter is given to the school I shall introduce this kind of work also in Channapatna

Chipi work and wax work —Some poor Mohammadan ladies in these parts of the Province add to the earnings of the male members of the family by doing a kind of work like the Buland Shahar chipi work (cloth printing) and the famous wax work of Peshawar The work consists in applying a sticky preparation on cloth in beautiful floral designs and then applying gold and silver paints and in some cases bronze paints I have observed some improvements introduced into the industry by Buland Shahar and Peshawar people

Along with linseed oil and rosin they make use of zinc white which is decidedly a better pigment than chalk which is used here and again instead of applying the

sticky substances to the cloth with the point of a needle as is done here the people of the North have got labour saving moulds and dies

I wish to introduce these improvements here with great advantage especially to poor widows in these parts

Extending market for Channapatna articles —I have also succeeded in extending the market for Channapatna Lacquered ware and musical wires by arranging with merchants of various places whom I met at Allahabad

Lac refining —I left Allahabad on the 8th January 1911 and on my way back I broke my journey at Burhanpur and minutely studied the methods and organisation of the lac factories of Chand Beig Karim Beig of Sindhi Mohalla and reached Channapatna on the forenoon of the 16th January 1911

General remarks —The chief point of difference between this Exhibition and the Exhibitions of preceding years is that there was a great facility for those interested in industrial development of the country by arranging to have experts at work in the Allahabad Exhibition These artizans demonstrated and explained the various processes which the raw material undergoes before it becomes a finished product I beg to submit that if arrangement is made to get the services of experts from different industrial centres throughout India for a period of a couple of months in connection with the Mysore Dasara Industrial and Agricultural Exhibition, the advantages accruing from this to the State cannot be overrated We could draw suggestions as to how best we could improve the present industries of the State, and also realise the latent possibilities If this be a very expensive measure in the opinion of the Government, I beg to offer an alternative that samples exhibiting the gradual processes involved in the different industries might be secured and arranged separately and printed monograms might be placed in connection with each giving full description of the various operations These samples might be procured from the Exhibition authorities at Allahabad who could easily furnish the required descriptions of the various processes

It is evident from what I have stated above that I have made use of the opportunity kindly given to me to the best of my abilities The accompanying specimens of improved lacquer works and refined silk waste will amply corroborate my statements Since I have returned from my tour with many ideas in my head regarding the improvement of industries, I request most respectfully that you may kindly appoint me whole time Superintendent of the Industrial School, so that I may be able to devote all my energies towards the regeneration of the local industries

Conclusion —In conclusion, I think it my duty to express my thanks to Mr G R Murray, I C S , the Secretary, and Mr Babu Jang Bahadur Lal, the Assistant Secretary, for the courtesy shown to me and all the facilities given by exerting their influence with the demonstrators of industries in the matter of giving me all the information I required without making any secret Although the period of my stay at Allahabad was very short, I am glad I have succeeded in learning many important things through the kindness of these sympathetic and broad minded gentlemen

I have the honour to be,

Sir,

Your most obedient servant,

M BAVASAHIB MIYAN,

Superintendent

CHANNAPATNA,
4th February 1911

Edn 81]

(6)

OFFICE OF INSPECTOR GENERAL OF EDUCATION IN MYSORE

No 8556-7 / 643 Enc 12 Bangalore 7th May 1912

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From

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The Inspector General of Education in Mysore

To

C S Balasundara Iyer, Esq , B A ,
Offg Secretary to the Govern ert of His Highness
the Ma ara a of Mysore, General & Revenue Depts

SIR

In continuation of this office letter No 8495-9/636 of the 3rd instant, I have the honour to forward herewith 12 copies of Appendix to the Report on the Allahabad Exhibition of Mr M Hiriyanna, M A , L T , Head Master Normal School, Mysore

I have the honour to be,

Sir,

Your most obedient servant,

S Krishnaswami Aiyangar

Assistant to the Inspector General
of Education,
For Inspector General

TNR

G I B—1500—9 6 09

APPENDIX
Secondary Department

SCHEME FOR RURAL EDUCATION

RECEIVED FROM ASTON AND COTE SCHOOL

The purpose of education is to lead the child in to the fullest truest and most fruitful relations with the world in which he lives (Welton)

Land cultivation is the future employment of the average boy of the county district therefore gardening has been chosen as the core of this scheme

Subject	Details
I History	Ordinary course supplemented by history of County
II English	1 Reading and conversational lessons— (i) Matters of rural interest social economic and scientific *e g* co operation market prices of agricultural products and why they vary small holdings rain and rainfall weather forecasts temperature barometer pressure rural and national institutions *e g* Parish Council Parliament (ii) Leaflets of Board of Agriculture dealing with farm annuals garden crops insect and other pests poultry and bees manures etc will be read 2 Writing— Filling in of Garden Note Book Filling in of various forms used by farmers Forms of addresses forms of accounts 3 Composition— To be based on rural subjects which have occupied the attention of students *e g* accounts of observations of plant or animal life 4 Letter writing
III Geography	The various parts of the earth will be studied as follows — i Position with regard to land and sea masses and with regard to England ii Latitude iii Prevailing winds iv Consideration of contour v Climate rainfall etc vi Rivers vii Soil viii Productions (vegetable mineral and animal) ix Industries Towns Commerce Export and Imports An attempt will be made by dividing the countries into natural regions to show clearly the influence of physical features etc on the life of mankind vegetation etc In the consideration of climate attention will be paid to maximum and minimum temperature of places as well as the average temperature Stress will also be laid on the importance of studying seasonal distribution of rain as well as annual rainfall in order to understand the effect of climate on vegetation In the study of the regions emphasis will be laid on Sections (iii)—(viii) and the Geography of the County will receive special attention
IV Rural Science	The plant as a whole Flowers and fertilisation How seeds are scattered The structure germination and growth of seeds and calculation of cultural value Examination of various forms of roots Structure and use of leaves Relation of plant to air water and soil Examination of plants with special reference to their classification Simple chemistry of air and water Brief consideration of elements and compounds important in agriculture Ingredients which are used by plants and therefore supplied by manures to the soil classification of manures mixing of manures Study of garden charts Rain water

Subject	Details
	and what it adds to the land Detection of substances in water Use of thermometer in taking temperature of air water milk and soils Soils—different kinds differences in proportion to clay and and humus porosity and capillary power variation in temperature difference between surface and sub soil Common birds—friends and foes of the farmer
Gardening	The greater part of the school garden will be divided into plots worked by two boys a big boy and a smaller boy There will also be a demonstration plot containing fruit trees a seed bed and a plot for experiments
	Preparation of the land Manures and manuring soils Arrangement of plots to make most of ground Proper use of gardening implements Seeds and germination Points to be noted in connection with treatment including purchasing sowing and harvesting of seeds Seedlings and their treatment Vegetables Their uses and general treatment Cultivation and management of root crop green crop intermediate crop garden legumes and potatoes Diseases and pests affecting vegetables Method of treatment
	Fruit crops—Bush fruits—propagation and general treatment Fruit stocks—propagation and preparation for working Large fruits—propagation and cultivation Young fruit trees—treatment Pruning—branch pruning and root pruning Flower garden—seasonal operations Selection and raising of suitable plants
VI Wood work	Besides the purely educational aim of manual instruction the aim of the lessons is to give the lads an acquaintance with the elements of construction of common wooden objects of the field or garden
	The models will be arranged in a progressive order of difficulty so as to give practice in the use of the following tools —jack plane chisels brace and centre bit spoke shave file nails hammer screw driver and oilstone Dimensioned working drawings of each model or object will be drawn by each boy before the manual exercise
	Acquaintance with varieties of wood in common use Measurement of wood Repairing Preservation of wood by paint and tar
	The following is a list of some of the Models —Dibber seed box potato box rake milking stool hencoop beehive garden gate ladder door
VII Free Hand Drawing and Brush work	The drawing and brush work lesson will follow the lesson on Rural Science The lesson will be used to illustrate the science lesson— to impress on the memory by means of drawings and paintings the information gained by observation On the page opposite to the drawings accounts will be written of the lessons or things observed Thus the Drawing Book will contain the full notes of the rural science lessons *e g* on the left hand side of the Drawing Book there will be drawings paintings and pressed specimens of weeds whilst on the opposite page notes on the danger and means of exterminating these weeds will be written
VIII Arithmetic	First four rules applied to number money weights and measures Problems will relate to agricultural commodities Fractions—vulgar and decimal Introduction to the metric system Percentages followed by applications to agricultural commodities such as manures feeding stuffs milk etc Average value with special reference to prices of agricultural products Invoices net and discount prices Profit and loss Systematic methods of recording income and expenditure Simple interest Local penny bank
	Rates and taxes—Ratio albuminoid ratio of feeding stuffs. Valuation of manures by unit method (Board of Agriculture Leaflet No 72) Calculations of value of local produce in local and other markets Squared paper work—applications to rainfall and temperature Number of hurdles to sheepfold Exercises in reading analyses of manures Calculations on cultural value of seeds Angles and their measurement Areas of rectangles triangles circles etc as far as they bear on measurement of fields surfaces of ricks floor space etc volume capacity of water tanks wells drain pipes etc gallons of water per acre from rainfall in inches volume of wood in a tree cubic air contents of farm buildings sheds etc measurement of solid bodies haystacks manure heaps etc Simple book keeping

Subject	Details
IX Mechanical and Object Drawing	The lesson will be closely connected with mensuration—part of arithmetic lesson—the wood work lesson and the gardening lesson Scale drawing —Plans of school rooms measured field Scale drawing of ricks sheep trough tool house Plans of school garden and individual plots Diagram atic representation of grafting hedge layering etc Object drawing —Doors windows partitions gates out buildings milk pail garden implements etc Memory drawin of common objects and tools as mill stone sign posts simple plough, a well trained fruit tree etc

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GRS 26]

File No 485-11

Serial No 3

Diary No of letter replied to 6578

No 7529
Edn 435-11-
9263 13

General and Revenue Secretariat
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To
The Dist of Cuz

Date of issue 26 3 13

Signed by Mr BR

Sir,

With Reference to your letter No 8495-9/686 dtd 3rd May 1912 submitting the Report of certain Officers deputed to the Allahabad Exhibition of December 1910, I am directed to enquire whether the Report of Mr. G Seshasawmy Aiyar has since been received in your

over

SUBJECT

office and if so, to forward
the same to Govt. at an
early date. If not he may
be asked to submit his
report at once and also
to explain the delay in
the matter

J Manvell

22/3/13

Endsy

Ex

Ldn
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Copied

List of enclosures,

Copied by AW 25/3

Examined by JW 25/3

Edn 92-12

18023 / 1266

Edn 435-11

Serial 4

GHS 57

GOVERNMENT OF HIS HIGHNESS THE MAHARAJA OF MYSORE

Education

GENERAL AND REVENUE DEPARTMENT

No dated the 16 6 1913

1266 (Edn)

REPLY

No 167 - - 17 dated the 2nd July 1913

To

The Insp^r Genl of Education

To

The Secretary to the Government of H H the Maharaja of Mysore General and Revenue Dept

SUBJECT

Submission of Mr G Subbu ama Iyer's report in connection with his deputation to the Allahabad Exhibition of Dec^r 1910

OFFICE MEMORANDUM

The undersigned is directed to invite attention to the marginally noted communication and to request that the General and Revenue Secretariat may be informed in the column opposite of the cause of delay in furnishing a reply and of the approximate date on which a reply may be expected

No 1 1 1 26 3 13

He is also to request that the General and Revenue Secretariat may be favoured with a reply to this reminder not later than the 4th July 1913

Bo

Has the Honour to inform that in spite of the following reminders

x

Mr Subbus am Iyer has not submitted this report and there is apparently little likelihood of its sending it now

x

No 8583-92/546 of 4-4-1911

No 7539/539 of 25-3-1912

No 1818/121 of 8-8-1912

No 11354/1843 of 1-4-1913

No 13088/1550 of 13-5-1913

for Secy (Gen)

Inspector General

7529

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Previous reminder

5998 & 6 5-13

(11—7000 p — 1.00)

GRS 28]

File No 435-11
Serial No 5

Diary No of letter replied to 242

Proceedings of the Government of His Highness the Maharaja of Mysore

GENERAL AND REVENUE SECRETARIAT
( )

the 191

READ— Letter No 9495/9 dated 636
3rd May 1912 from the Dept
of Edn in Mysore submitting
the Report of certain Officers
deputed to the Allahabad
Exhibition of December 1910
and stating that the Inspec-
ting Officer, Dept of Ind
Art School, Mysore, has not
been relieved through Genl

Date of issue 11 & 13

Signed by

ORDER THEREON—No

over

SUBJECT

Reminders were issued to him
on the subject

2 Correspondence ending
with docket No 167/17 dt. the
2nd July 1913 from the same
officer stating that the
Subdivisional Officer has not yet
submitted his Report and that
there is apparently little
likelihood of his sending
it soon

Order thereon

No 1812-4 dt 11 8 13
EDN43511

Govt sanctioned the deputation
of certain Govt officers to the
Allahabad Exhibition of 1910
with the District direction
that each officer deputed
should submit a Report
about his visit to the Exhibition
for Subdivisional Officer

C R S 27]

GENERAL AND REVENUE
SECRETARIAT

(Continuation sheet draft form)

then

Reports of the Indl. School
now meeting under the Director
of Industries and Commerce
Deputn, who was one of the
officers deputed is said
to have not yet submitted his
Report though it is more
than 3 years since his
return from the deputation
Govt. Regret to observe that
their clear order ~~in that~~
has not been observed by
~~not Subordinate~~ the Officers. They
are therefore constrained
to direct that the travelling
allowances drawn by him
in connection with his
trip to Allahabad &
other places amounting
to about Rs 372-7-0 be
Recovered from his pay
in the usual Course. The
Comptroller is Requested
to take the necessary

action for Recovery of the ~~Govt~~ amount as directed above.

2 The Dy Ch of Govt is requested to state whether Mr M. Ramachandra Rao ~~Asst~~ and R. T. Ramakrishnan of the Indl School, Mysore ~~have~~ have submitted their Reports and if not do, forward copies thereof for the information of Govt.

8/8/13

C&B
6/8/13

6/8/13

~~Asst~~ Secy, Govt Deptt

To The Dy Ch of Govt
" Comptroller
" Director of Industries
" Commerce ~~Deptt~~ in Mysore